					DEPARTMENT	T OF NA	OF UTAH TURAL RES GAS AND M				AMENI	FO DED REPOR	RM 3	
		AF	PLICATION	FOR PEI	RMIT TO DRILL					1. WELL NAME and NU		-15-9-16		
2. TYPE O	F WORK	DRILL NEW WELL	REENT	ER P&A W	/ELL DEEPEN	I WELL [	)			3. FIELD OR WILDCAT		NT BUTTE		
4. TYPE O	F WELL				Methane Well: NO		~			5. UNIT or COMMUNITIZATION AGREEMENT NAME  GMBU (GRRV)				
6. NAME (	OF OPERATOR		NEWFIELD PF							7. OPERATOR PHONE				
8. ADDRE	SS OF OPERAT	OR								9. OPERATOR E-MAIL	-	ewfield.co	<b>m</b>	
	AL LEASE NUM		KI 3 BOX 303		n, UT, 84052  MINERAL OWNERS	SHIP				12. SURFACE OWNERS		ewileid.co	<u></u>	_
		UTU-017985			FEDERAL (III) INC	DIAN 🔲	) STATE (	) FEE(	)		DIAN 🔲	STATE		EE ()
13. NAME	OF SURFACE	OWNER (if box 12	= 'fee')							14. SURFACE OWNER	R PHONE	(if box 12	= 'fee')	
15. ADDR	ESS OF SURFA	CE OWNER (if box	12 = 'fee')							16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
	N ALLOTTEE O	R TRIBE NAME			. INTEND TO COMM ULTIPLE FORMATIO		PRODUCTIO	N FROM		19. SLANT				
	,				YES (Submit C	Comming	ling Applicat	ion) NO [	)	VERTICAL DIF	RECTION	AL D H	HORIZONT	AL
20. LOC	ATION OF WELL	-		FOOT	AGES	QT	r-qtr	SECTION	ON	TOWNSHIP	R/	ANGE	МЕ	RIDIAN
LOCATIO	N AT SURFACE		19	907 FNL	2015 FEL	8	SWNE	15		9.0 S	16	6.0 E		S
Top of U	ppermost Prod	lucing Zone	24	115 FNL	2375 FEL	S	SWNE	15		9.0 S	16	6.0 E		S
At Total Depth 2291 FSL			291 FSL :	2473 FWL	N	NESW	15		9.0 S	16	6.0 E		S	
21. COUN	ITY	DUCHESNE		22.	. DISTANCE TO NEA		EASE LINE (F	Feet)		23. NUMBER OF ACRE	ES IN DRI 2		IT	
					. DISTANCE TO NEA pplied For Drilling	or Comp		E POOL		26. PROPOSED DEPTI		TVD: 609	10	
27. ELEV	ATION - GROUN	<b>5685</b>		28.	. BOND NUMBER	WYB0	000493			29. SOURCE OF DRILI WATER RIGHTS APPR		MBER IF A	PPLICAB	LE
					Hole, Casing									
String	Hole Size	Casing Size 8.625	0 - 300	Weigh 24.0			Max Mu 8.3			Class G		Sacks 138	Yield 1.17	Weight 15.8
Prod	7.875	5.5	0 - 6260	15.5			8.3		Pren	nium Lite High Strer	ngth	294	3.26	11.0
										50/50 Poz		363	1.24	14.3
					А	TTACH	IMENTS							
	VER	RIFY THE FOLLO	WING ARE A	TTACHE	ED IN ACCORDAN	NCE WIT	TH THE UT	AH OIL ANI	D GAS	CONSERVATION G	ENERA	L RULES		
<b>✓</b> w	ELL PLAT OR M	AP PREPARED BY	LICENSED SUR	VEYOR O	R ENGINEER		<b>⊯</b> cow	IPLETE DRIL	LING PI	LAN				
AF	FIDAVIT OF STA	ATUS OF SURFACE	OWNER AGRE	EMENT (IF	F FEE SURFACE)		FOR	M 5. IF OPER	ATOR IS	S OTHER THAN THE LE	EASE OW	NER		
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						))	торо	OGRAPHICAL	L MAP					
NAME Mandie Crozier TITLE Regulatory Tech						Tech			PHO	NE 435 646-4825				
SIGNATU	IRE				<b>DATE</b> 12/28/201	1			ЕМА	IL mcrozier@newfield.c	com			
	BER ASSIGNED 01351153(				APPROVAL				B	wayill				
									Pe	rmit Manager				

# NEWFIELD PRODUCTION COMPANY GMBU M-15-9-16 AT SURFACE: SW/NE SECTION 15, T9S R16E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

 Uinta
 0' – 1395'

 Green River
 1395'

 Wasatch
 5940'

 Proposed TD
 6260'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation (Oil) 1395' – 5940'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Calcium (Ca) (mg/l)

Dissolved Iron (Fe) (ug/l)

Dissolved Magnesium (Mg) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l)

Dissolved Total Solids (TDS) (mg/l)

RECEIVED: December 28, 2011

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: GMBU M-15-9-16

Cino	Interval		Weight Grade		Counling	Design Factors			
Size	Тор	Bottom	Weight	Grade	Coupling	Burst	Collapse	Tension	
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"		300				17.53	14.35	33.89	
Prod casing	O'	6 260	15.5	J-55	LTC	4,810	4,040	217,000	
5-1/2"	0'	0' 6,260'				2.42	2.03	2.24	

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU M-15-9-16

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft³/sk)	
Surface casing 30		Class G w/ 2% CaCl	138	30%	15.8	1.17	
Ourrace casing	300	161		30 70	10.0	7	
Prod casing	4,260'	Prem Lite II w/ 10% gel + 3%	294	200/	44.0	2.00	
Lead	4,260	KCI	960	30%	11.0	3.26	
Prod casing	2 000	50/50 Poz w/ 2% gel + 3%	363	200/	14.2	1.24	
Tail	2,000'	KCI	451	30%	14.3	1.24	

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL</u>:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to ±300 feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ±300 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

#### 9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

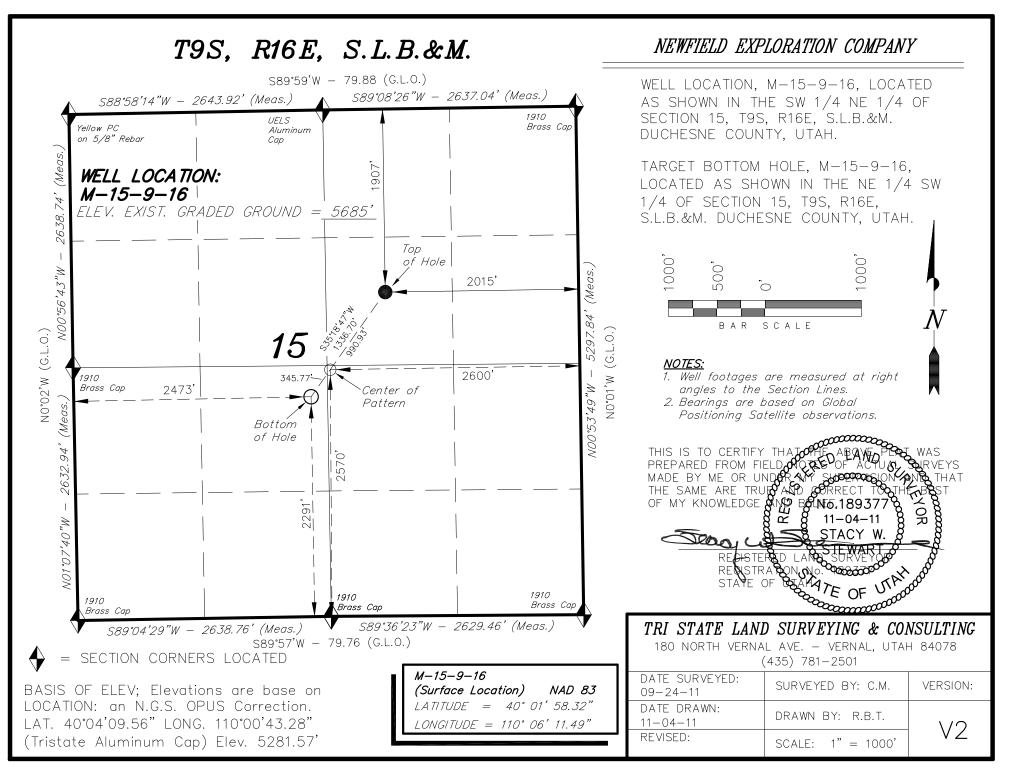
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

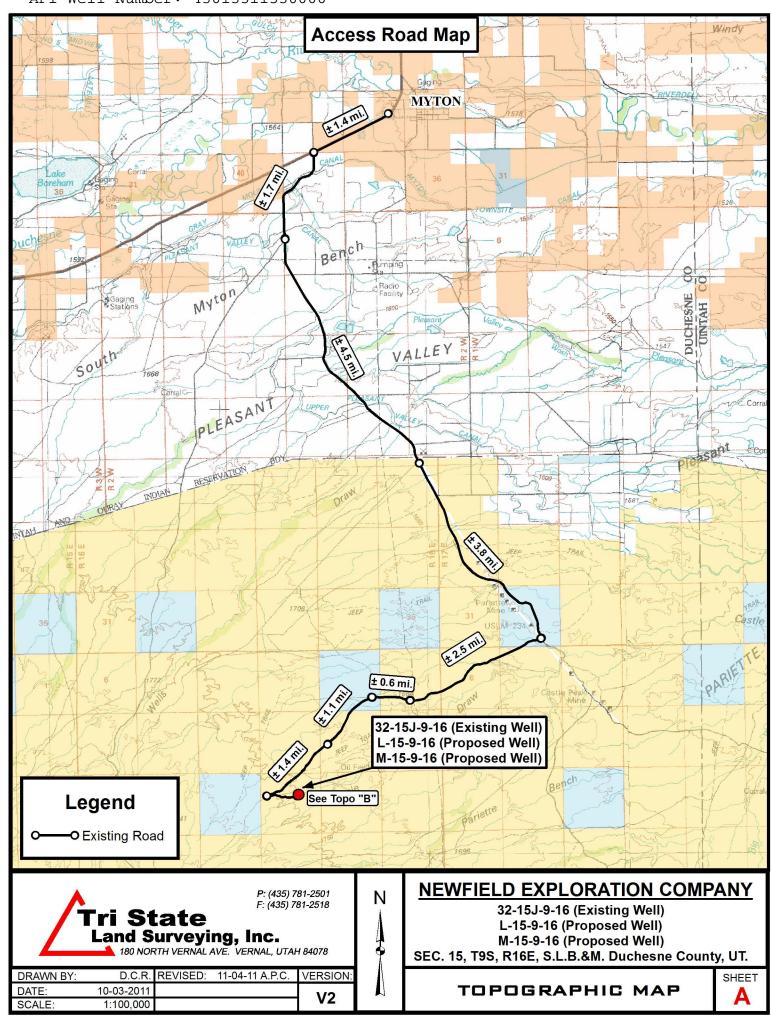
bottomhole pressure will approximately equal total depth in feet multiplied by a  $0.433~\mathrm{psi/foot}$  gradient.

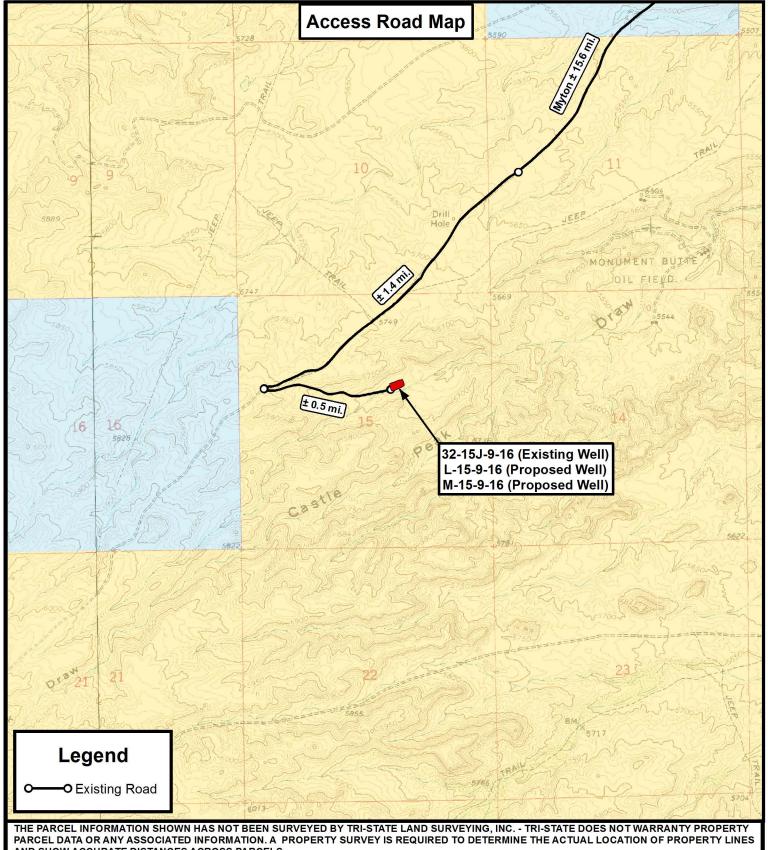
#### 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

It is anticipated that the drilling operations will commence the second quarter of 2012, and take approximately seven (7) days from spud to rig release.

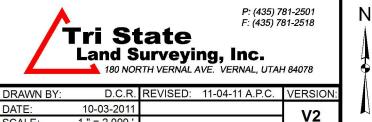
RECEIVED: December 28, 2011







AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



SCALE

1 " = 2,000

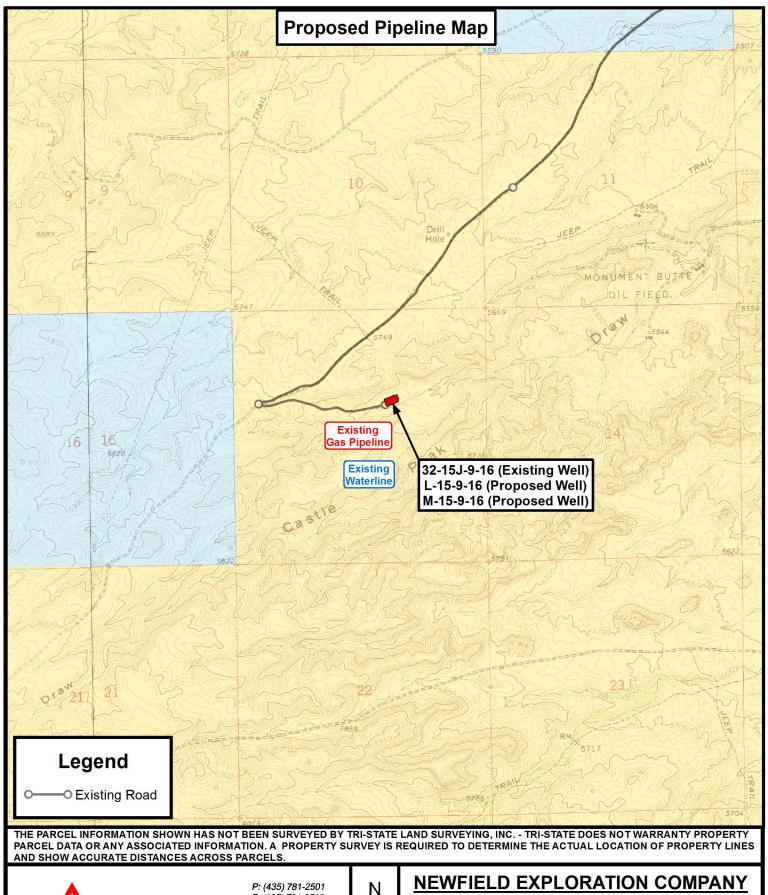
### **NEWFIELD EXPLORATION COMPANY**

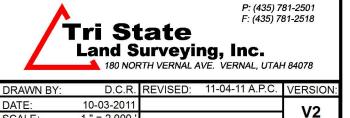
32-15J-9-16 (Existing Well) L-15-9-16 (Proposed Well) M-15-9-16 (Proposed Well)

SEC. 15, T9S, R16E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP







SCALE

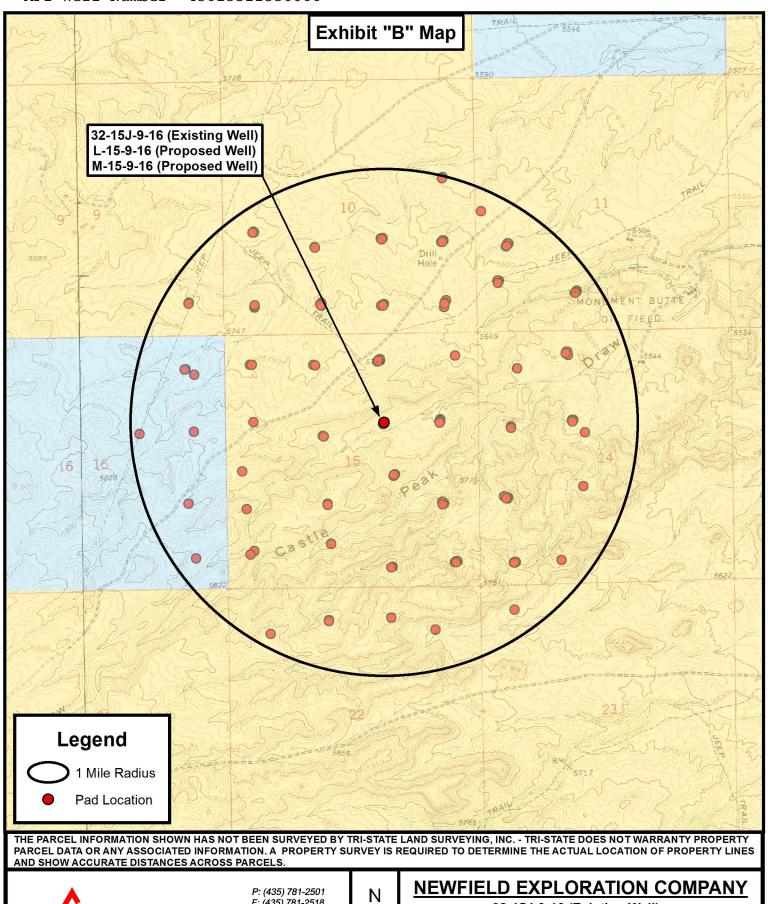
1 " = 2,000

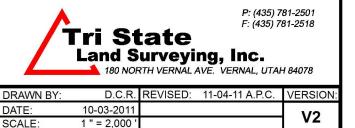
32-15J-9-16 (Existing Well) L-15-9-16 (Proposed Well) M-15-9-16 (Proposed Well)

SEC. 15, T9S, R16E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP







32-15J-9-16 (Existing Well) L-15-9-16 (Proposed Well) M-15-9-16 (Proposed Well)

SEC. 15, T9S, R16E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP





## **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 15 T9S, R16E M-15-9-16

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

03 November, 2011





#### **Payzone Directional**

Planning Report



Database: EDM 2003.21 Single User Db Company: NEWFIELD EXPLORATION Project: USGS Myton SW (UT) Site: SECTION 15 T9S, R16E

 Well:
 M-15-9-16

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Newfield Rig) M-15-9-16 @ 5697.0ft (Newfield Rig)

True

Minimum Curvature

Project USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: US State Plane 1983

Geo Datum: North American Datum 1983

Map Zone: Utah Central Zone

System Datum: Mean Sea Level

Site SECTION 15 T9S, R16E

Northing: 7,183,000.00 ft Site Position: Latitude: 40° 1' 50.203 N From: Мар Easting: 2,036,100.00 ft Longitude: 110° 5' 12.634 W **Position Uncertainty:** 0.0 ft Slot Radius: **Grid Convergence:** 0.91°

Well M-15-9-16, SHL LAT: 40 01 58.32 LONG: -110 06 11.49

 Well Position
 +N/-S
 820.8 ft
 Northing:
 7,183,749.24 ft
 Latitude:
 40° 1' 58.320 N

 +E/-W
 -4,577.9 ft
 Easting:
 2,031,509.87 ft
 Longitude:
 110° 6' 11.490 W

Wellbore Wellbore #1 Field Strength Magnetics **Model Name** Sample Date Declination **Dip Angle** (nT) (°) (°) 11/1/2011 IGRF2010 11.28 65.77 52,219

Design	Design #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:		Depth From (TVD)	+N/-S	+E/-W	Direction	
		(ft)	(ft)	(ft)	(°)	
		4,800.0	0.0	0.0	215.31	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.3	15.00	215.31	1,588.9	-106.3	-75.3	1.50	1.50	0.00	215.31	
4,924.7	15.00	215.31	4,800.0	-808.6	-572.8	0.00	0.00	0.00	0.00	M-15-9-16 TGT
6,260.3	15.00	215.31	6,090.0	-1,090.8	-772.6	0.00	0.00	0.00	0.00	



#### **Payzone Directional**

**Planning Report** 



Database: EDM 2003.21 Single User Db Company: NEWFIELD EXPLORATION Project: USGS Myton SW (UT) Site: SECTION 15 T9S, R16E

 Well:
 M-15-9-16

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Newfield Rig) M-15-9-16 @ 5697.0ft (Newfield Rig)

True

Minimum Curvature

Design:	Design #1								
Planned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
						` ,	` '	, ,	, ,
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	215.31	700.0	-1.1	-0.8	1.3	1.50	1.50	0.00
800.0	3.00	215.31	799.9	-4.3	-3.0	5.2	1.50	1.50	0.00
900.0	4.50	215.31	899.7	- <del>4</del> .5 -9.6	-6.8	11.8	1.50	1.50	0.00
900.0	4.50	213.31	099.1	-9.0	-0.0	11.0	1.50	1.50	0.00
1,000.0	6.00	215.31	999.3	-17.1	-12.1	20.9	1.50	1.50	0.00
1,100.0	7.50	215.31	1,098.6	-26.7	-18.9	32.7	1.50	1.50	0.00
1,200.0	9.00	215.31	1,197.5	-38.4	-27.2	47.0	1.50	1.50	0.00
1,300.0	10.50	215.31	1,296.1	-52.2	-37.0	64.0	1.50	1.50	0.00
1,400.0	12.00	215.31	1,394.2	-68.1	-48.2	83.5	1.50	1.50	0.00
		215.31		-86.1	-61.0	105.5	1.50		0.00
1,500.0 1,600.3	13.50		1,491.7		-61.0 -75.3	105.5		1.50	
	15.00	215.31	1,588.9	-106.3			1.50	1.50	0.00
1,700.0	15.00	215.31	1,685.2	-127.3	-90.2	156.0	0.00	0.00	0.00
1,800.0	15.00	215.31	1,781.8	-148.5	-105.2	181.9	0.00	0.00	0.00
1,900.0	15.00	215.31	1,878.4	-169.6	-120.1	207.8	0.00	0.00	0.00
2,000.0	15.00	215.31	1,975.0	-190.7	-135.1	233.7	0.00	0.00	0.00
2,100.0	15.00	215.31	2,071.6	-211.8	-150.1	259.6	0.00	0.00	0.00
2,200.0	15.00	215.31	2,168.2	-233.0	-165.0	285.5	0.00	0.00	0.00
2,300.0	15.00	215.31	2,264.7	-254.1	-180.0	311.4	0.00	0.00	0.00
2,400.0	15.00	215.31	2,361.3	-275.2	-194.9	337.3	0.00	0.00	0.00
2,500.0	15.00	215.31	2,457.9	-296.4	-209.9	363.2	0.00	0.00	0.00
						389.1	0.00	0.00	0.00
2,600.0	15.00	215.31	2,554.5	-317.5	-224.9				
2,700.0	15.00	215.31	2,651.1	-338.6	-239.8	414.9	0.00	0.00	0.00
2,800.0	15.00	215.31	2,747.7	-359.7	-254.8	440.8	0.00	0.00	0.00
2,900.0	15.00	215.31	2,844.3	-380.9	-269.8	466.7	0.00	0.00	0.00
3,000.0	15.00	215.31	2,940.9	-402.0	-284.7	492.6	0.00	0.00	0.00
3,100.0	15.00	215.31	3,037.5	-423.1	-299.7	518.5	0.00	0.00	0.00
3,200.0	15.00	215.31	3,134.1	-444.2	-314.7	544.4	0.00	0.00	0.00
3,300.0	15.00	215.31	3,230.7	-465.4	-329.6	570.3	0.00	0.00	0.00
3,400.0	15.00	215.31	3,327.2	-486.5	-344.6	596.2	0.00	0.00	0.00
3,500.0	15.00	215.31	3,423.8	-507.6	-359.6	622.1	0.00	0.00	0.00
3,600.0	15.00	215.31	3,520.4	-528.8 540.0	-374.5	648.0	0.00	0.00	0.00
3,700.0	15.00	215.31	3,617.0	-549.9	-389.5	673.8	0.00	0.00	0.00
3,800.0	15.00	215.31	3,713.6	-571.0	-404.4	699.7	0.00	0.00	0.00
3,900.0	15.00	215.31	3,810.2	-592.1	-419.4	725.6	0.00	0.00	0.00
4,000.0	15.00	215.31	3,906.8	-613.3	-434.4	751.5	0.00	0.00	0.00
4,100.0	15.00	215.31	4,003.4	-634.4	-449.3	777.4	0.00	0.00	0.00
4,200.0	15.00	215.31	4,100.0	-655.5	-464.3	803.3	0.00	0.00	0.00
4,300.0	15.00	215.31	4,196.6	-676.6	-479.3	829.2	0.00	0.00	0.00
4,400.0	15.00	215.31	4,293.1	-697.8	-494.2	855.1	0.00	0.00	0.00
4,500.0	15.00	215.31	4,389.7	-718.9	-509.2	881.0	0.00	0.00	0.00
4,600.0	15.00	215.31	4,486.3	-740.0	-524.2	906.9	0.00	0.00	0.00
4,700.0	15.00	215.31	4,582.9	-761.2	-539.1	932.7	0.00	0.00	0.00
4,800.0	15.00	215.31	4,679.5	-782.3	-554.1	958.6	0.00	0.00	0.00
4,900.0	15.00	215.31	4,776.1	-803.4	-569.1	984.5	0.00	0.00	0.00
4,924.7	15.00	215.31	4,800.0	-808.6	-572.8	990.9	0.00	0.00	0.00
5,000.0	15.00	215.31	4,872.7	-824.5	-584.0	1,010.4	0.00	0.00	0.00
5,100.0	15.00	215.31	4,969.3	-845.7	-599.0	1,036.3	0.00	0.00	0.00
5,200.0	15.00	215.31	5,065.9	-866.8	-613.9	1,062.2	0.00	0.00	0.00
5,200.0	10.00	210.01	0,000.0	500.0	010.3	1,002.2	0.00	0.00	0.00



#### **Payzone Directional**

Planning Report



Database: Company: Project: Site: EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 15 T9S, R16E

 Well:
 M-15-9-16

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Newfield Rig) M-15-9-16 @ 5697.0ft (Newfield Rig)

True

Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.0	15.00	215.31	5,162.5	-887.9	-628.9	1,088.1	0.00	0.00	0.00
5,400.0	15.00	215.31	5,259.1	-909.0	-643.9	1,114.0	0.00	0.00	0.00
5,500.0	15.00	215.31	5,355.6	-930.2	-658.8	1,139.9	0.00	0.00	0.00
5,600.0	15.00	215.31	5,452.2	-951.3	-673.8	1,165.8	0.00	0.00	0.00
5,700.0	15.00	215.31	5,548.8	-972.4	-688.8	1,191.6	0.00	0.00	0.00
5,800.0	15.00	215.31	5,645.4	-993.6	-703.7	1,217.5	0.00	0.00	0.00
5,900.0	15.00	215.31	5,742.0	-1,014.7	-718.7	1,243.4	0.00	0.00	0.00
6,000.0	15.00	215.31	5,838.6	-1,035.8	-733.7	1,269.3	0.00	0.00	0.00
6,100.0	15.00	215.31	5,935.2	-1,056.9	-748.6	1,295.2	0.00	0.00	0.00
6,200.0	15.00	215.31	6,031.8	-1,078.1	-763.6	1,321.1	0.00	0.00	0.00
6,260.3	15.00	215.31	6,090.0	-1,090.8	-772.6	1,336.7	0.00	0.00	0.00

RECEIVED: December 28, 2011

API Well Number: 43013511530000 Project: USGS Myton SW (UT)



Site: SECTION 15 T9S, R16E

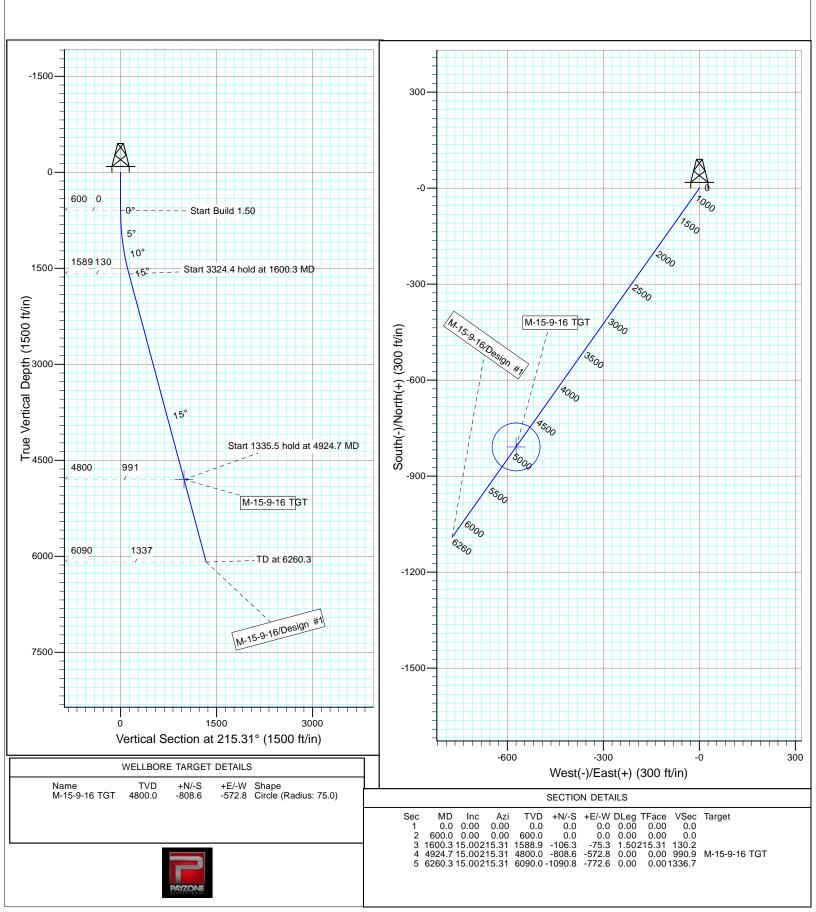
Well: M-15-9-16 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.28° Magnetic Field

Strength: 52219.0snT Dip Angle: 65.77° Date: 11/1/2011 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



### NEWFIELD PRODUCTION COMPANY GMBU M-15-9-16 AT SURFACE: SW/NE SECTION 15, T9S R16E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU M-15-9-16 located in the SW 1/4 NE 1/4 Section 15, T9S R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction -10.0 miles  $\pm$  to it's junction with an existing road to the southwest; proceed in a southwesterly direction -5.6 miles  $\pm$  to it's junction with an existing road to the east; proceed in a easterly direction -0.5 miles  $\pm$  to the beginning of the access road the existing 32-15J-9-16 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 32-15J-9-16 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. <u>ANCILLARY FACILITIES</u>

RECEIVED: December 28, 2011

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. <u>WELL SITE LAYOUT</u>

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit # U-11-MQ-1055b 12/6/11, prepared by

Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, Wade Miller, 10/26/11. See attached report cover pages, Exhibit "D".

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed GMBU M-15-9-16 was on-sited on 11/10/11. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Suzanne Grayson (Bureau of Land Management).

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU M-15-9-16, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU M-15-9-16, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

#### Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (435) 646-3721

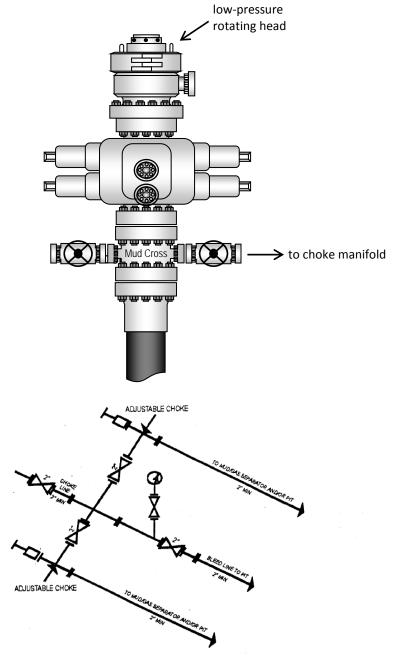
#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #M-15-9-16, Section 15, Township 9S, Range 16E: Lease UTU-017985 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

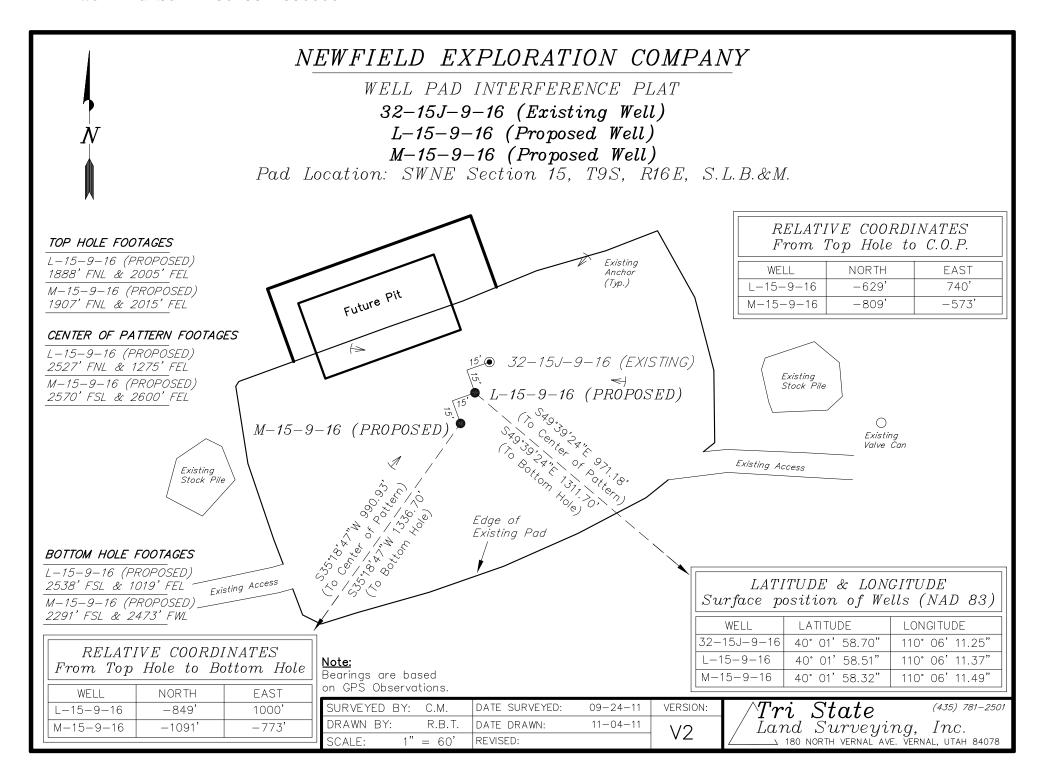
I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and

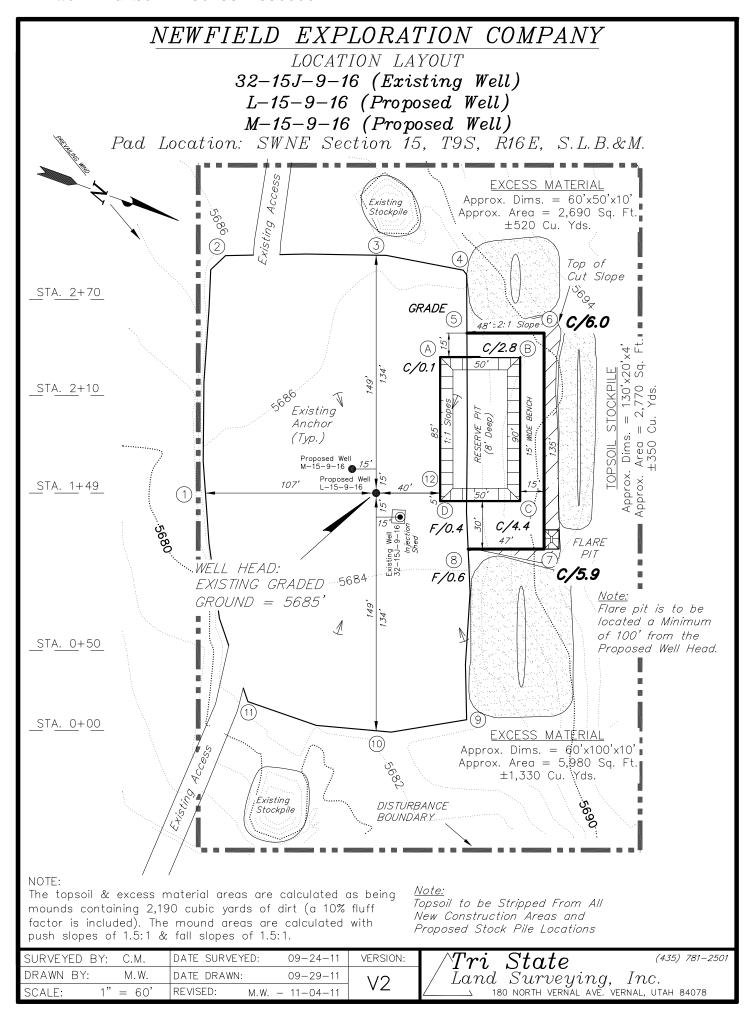
RECEIVED: December 28, 2011

### **Typical 2M BOP stack configuration**



2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY





1" = 60'



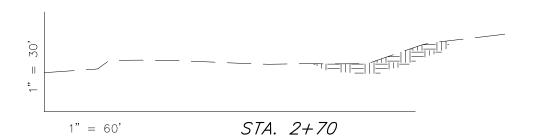
CROSS SECTIONS

32-15J-9-16 (Existing Well)

L-15-9-16 (Proposed Well)

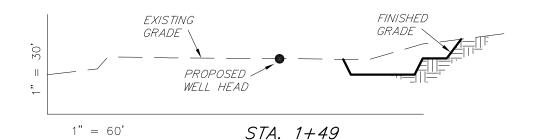
M-15-9-16 (Proposed Well)

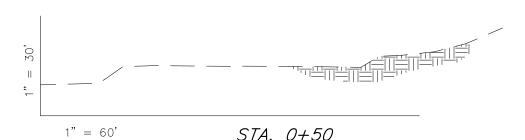
Pad Location: SWNE Section 15, T9S, R16E, S.L.B.&M.





STA. 2+10





NOTE: UNLESS OTHERWISE NOTED ALL CUT/FILL SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used)  (Expressed in Cubic Yards)									
ITEM	CUT	FILL	6" TOPSOIL	EXCESS					
PAD	670	20	Topsoil is not included	650					
PIT	1,030	0	in Pad Cut	1,030					

TOTALS

1,700

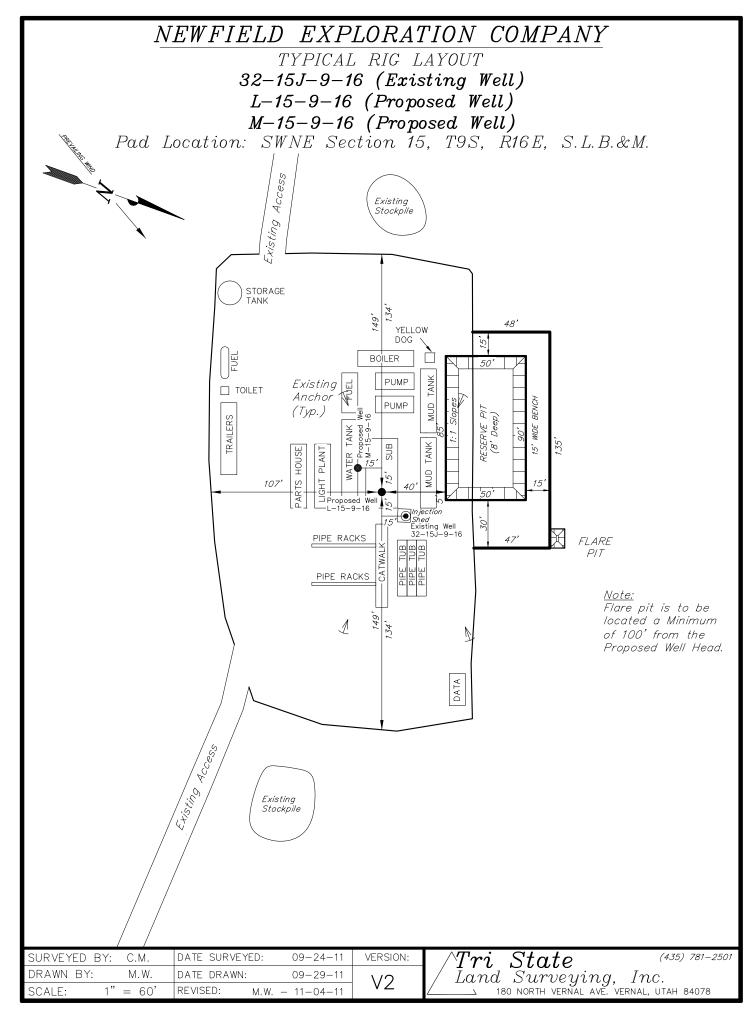
SURVEYED BY:	C.M.	DATE SURVEYED:	09-24-11	VERSION:
DRAWN BY:	M.W.	DATE DRAWN:	09-29-11	\/2
SCALE: 1"	= 60'	REVISED: M.W.	- 11-04-11	V Z

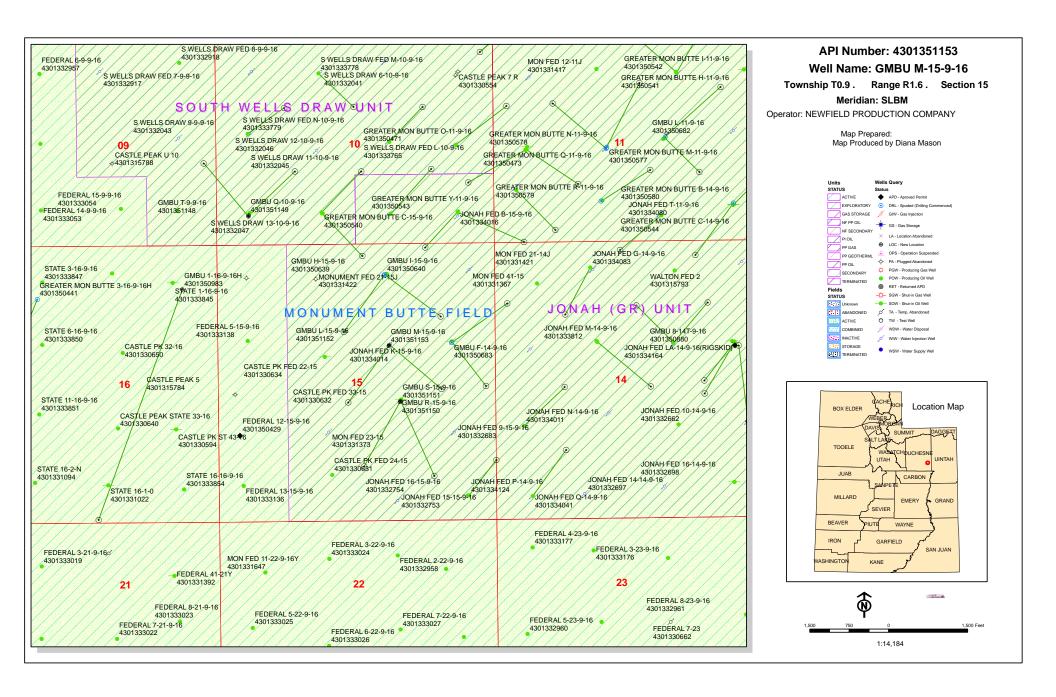
 $egin{array}{ccccc} ar{Tri} & State & {}^{ ext{(435)}} & {}^{ ext{781-2501}} \ & Land & Surveying, & Inc. \ & \_ 
ightharpoonup & {}^{ ext{180}} & {}^{ ext{NORTH}} & {}^{ ext{VERNAL AVE. VERNAL, UTAH 84078} \ \end{array}$ 

20

310

1,680







#### VIA ELECTRONIC DELIVERY

January 3, 2012

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE: Directional Drilling

GMBU M-15-9-16

Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R16E Section 15: SWNE (UTU-017985)

1907' FNL 2015' FEL

At Target: T9S-R16E Section 15: NESW (UTU-017985)

2291' FSL 2473' FWL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company ("NPC") of an Application for Permit to Drill the above referenced well dated 12/28/2011, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4153 or by email at <a href="mailto:pburns@newfield.com">pburns@newfield.com</a>. Your consideration in this matter is greatly appreciated.

Sincerely,

Newfield Production Company

Peter Burns Land Associate

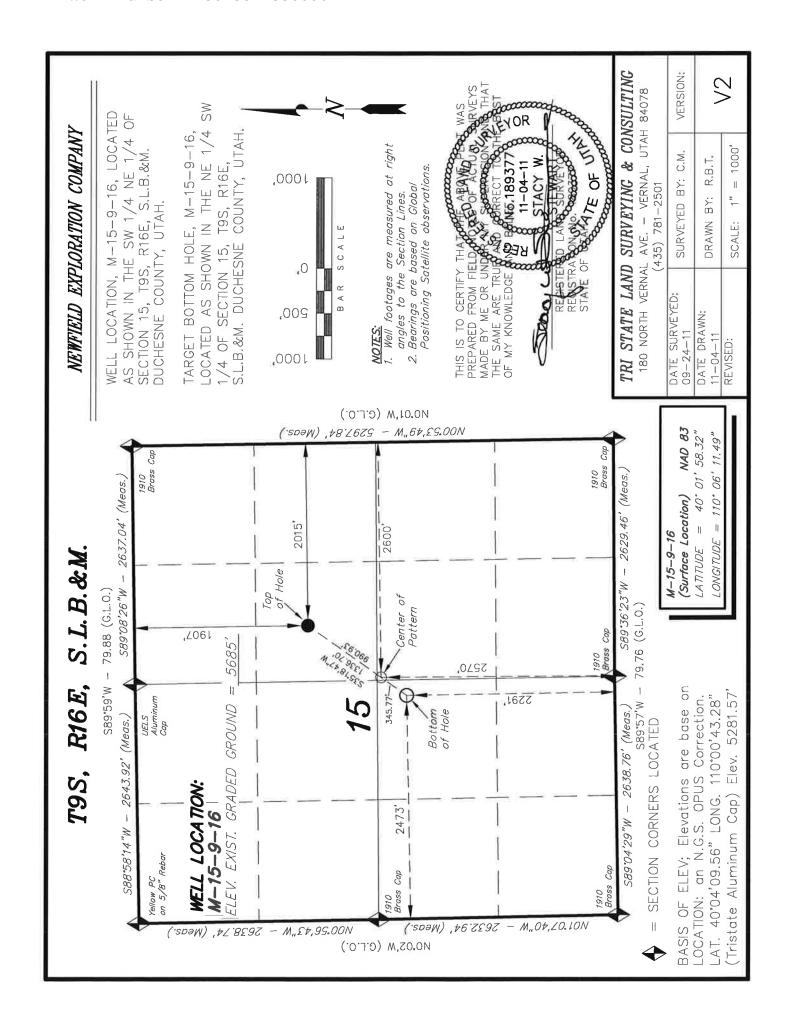
Form 3160-3 (August 2007)  UNITED ST  DEPARTMENT OF 7		FORM APPI OMB No. 10 Expires July 2	04-0136				
BUREAU OF LAND			5. Lease Serial No. UTU017985				
APPLICATION FOR PERMIT	TO DRILL OR RE	ENTER	6. If Indian, Allottee or Trib	e Name			
1a. Type of Work: ☑ DRILL ☐ REENTER			7. If Unit or CA Agreement, Name and No. GREATER MONUMENT				
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Oth	gle Zone	8. Lease Name and Well No GMBU M-15-9-16					
Name of Operator Contact;     NEWFIELD PRODUCTION COMPARAMAII: mcrozie	R	9. API Well No.					
3a. Address ROUTE #3 BOX 3630 MYTON, UT 84052	10. Field and Pool, or Explo MONUMENT BUTTE						
4. Location of Well (Report location clearly and in accorda	11. Sec., T., R., M., or Blk. a	and Survey or Arca					
At surface SWNE 1907FNL 2015FEL			Sec 15 T9S R16E M	er SLB			
At proposed prod. zone NESW 2291FSL 2473FWL							
14. Distance in miles and direction from nearest town or post of 17.5	office*		12. County or Parish DUCHESNE	13. State UT			
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in L	ease	17. Spacing Unit dedicated t	o this well			
1153'	560.00		20.00				
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth		20. BLM/BIA Bond No. on	file			
962'	6260 MD 6090 TVD		WYB000493				
21. Elevations (Show whether DF, KB, RT, GL, etc. 5685 GL	22. Approximate date 03/31/2012	work will start	23. Estimated duration 7 DAYS				
	24. Atta	achments					
The following, completed in accordance with the requirements of	f Onshore Oil and Gas C	Order No. 1, shall be attached to the	nis form:	*			
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest Syste SUPO shall be filed with the appropriate Forest Service Off		4. Bond to cover the operation Item 20 above). 5. Operator certification 6. Such other site specific information authorized officer.					
25. Signature (Electronic Submission)	Name (Printed/Typed) MANDIE CROZ	) ZIER Ph: 435-646-4825		Date 12/28/2011			
Title REGULATORY ANALYST							
Approved by (Signature)	Name (Printed/Typed)		Date				
Title	Office						
Application approval does not warrant or certify the applicant ho operations thereon.  Conditions of approval, if any, are attached.	lds legal or equitable titl	e to those rights in the subject lea	ase which would entitle the app	licant to conduct			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n States any false, fictitious or fraudulent statements or representate			make to any department or age	ency of the United			

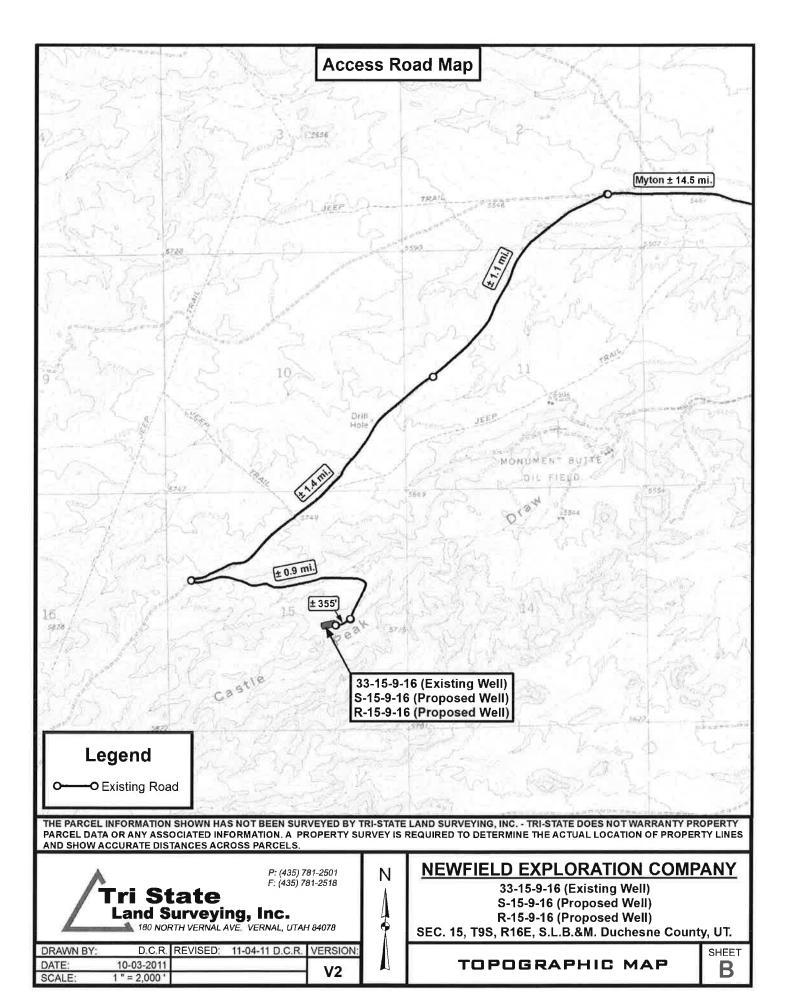
Additional Operator Remarks (see next page)

Electronic Submission #126880 verified by the BLM Well Information System For NEWFIELD PRODUCTION COMPANY, sent to the Vernal

### **Additional Operator Remarks:**

SURFACE LEASE: UTU-017985 BOTTOM HOLE LEASE: UTU-017985





## **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

January 6, 2012

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-51134 GMBU E-10-9-16 Sec 04 T09S R16E 0715 FSL 0731 FEL BHL Sec 10 T09S R16E 0164 FNL 0143 FWL

43-013-51135 GMBU K-4-9-16 Sec 03 T09S R16E 2021 FNL 0496 FWL

BHL Sec 04 T09S R16E 1990 FSL 0154 FEL

43-013-51136 GMBU J-13-9-15 Sec 18 T09S R16E 0723 FNL 0441 FWL BHL Sec 13 T09S R15E 1641 FNL 0084 FEL

43-013-51137 GMBU X-7-9-16 Sec 18 T09S R16E 0735 FNL 0459 FWL BHL Sec 07 T09S R16E 0322 FSL 1086 FWL

43-013-51138 GMBU I-8-9-16 Sec 08 T09S R16E 2103 FNL 0515 FEL BHL Sec 08 T09S R16E 1083 FNL 1688 FEL

43-013-51139 GMBU F-9-9-16 Sec 08 T09S R16E 2106 FNL 0494 FEL

43-013-51139 GMB0 F-9-9-16 Sec 08 1095 R16E 2106 FNL 0494 FEL BHL Sec 09 T095 R16E 1089 FNL 0256 FWL

43-013-51148 GMBU T-9-9-16 Sec 10 T09S R16E 0571 FSL 0621 FWL BHL Sec 09 T09S R16E 1595 FSL 0219 FEL

43-013-51149 GMBU Q-10-9-16 Sec 10 T09S R16E 0591 FSL 0626 FWL

BHL Sec 10 T09S R16E 1424 FSL 1513 FWL

RECEIVED: January 10, 2012

Page 2

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-51150 GMBU R-15-9-16 Sec 15 T09S R16E 2296 FSL 1811 FEL BHL Sec 15 T09S R16E 1069 FSL 2500 FEL 43-013-51151 GMBU S-15-9-16 Sec 15 T09S R16E 2314 FSL 1799 FEL BHL Sec 15 T09S R16E 0886 FSL 1170 FEL 43-013-51152 GMBU L-15-9-16 Sec 15 T09S R16E 1888 FNL 2005 FEL BHL Sec 15 T09S R16E 2538 FSL 1019 FEL 43-013-51153 GMBU M-15-9-16 Sec 15 T09S R16E 1907 FNL 2015 FEL BHL Sec 15 T09S R16E 2291 FSL 2473 FWL 43-013-51154 GMBU R-12-9-16 Sec 12 T09S R16E 0432 FSL 2385 FEL BHL Sec 12 T09S R16E 1555 FSL 2410 FWL 43-013-51155 GMBU V-12-9-16 Sec 13 T09S R16E 0615 FNL 1804 FEL BHL Sec 12 T09S R16E 0128 FSL 1213 FEL 43-013-51156 GMBU C-13-9-16 Sec 13 T09S R16E 0614 FNL 1825 FEL

This office has no objection to permitting the wells at this time.

BHL Sec 13 T09S R16E 0043 FNL 2084 FWL



Digitally signed by Michael L. Coulthard DN: cn=Michael L. Coulthard, o=Bureau of Land Date: 2012.01.06 14:17:58 -07'00'

bcc: File - Greater Monument Butte Unit Division of Oil Gas and Mining Central Files

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:1-6-12

#### **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

WELL NAME: GMBU M-15-9-16

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: SWNE 15 090S 160E Permit Tech Review:

> **SURFACE: 1907 FNL 2015 FEL Engineering Review:**

> BOTTOM: 2291 FSL 2473 FWL Geology Review:

**COUNTY: DUCHESNE** 

**LATITUDE**: 40.03278 LONGITUDE: -110.10326

**UTM SURF EASTINGS: 576509.00** NORTHINGS: 4431780.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-017985 PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

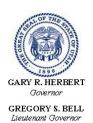
RECEIVED AND/OR REVIEWED:   ✓ PLAT	LOCATION AND SITING:
FLAT	1043-2-3.
<b>▶ Bond:</b> FEDERAL - WYB000493	Unit: GMBU (GRRV)
Potash	R649-3-2. General
Oil Shale 190-5	
Oil Shale 190-3	R649-3-3. Exception
Oil Shale 190-13	✓ Drilling Unit
<b>✓</b> Water Permit: 437478	Board Cause No: Cause 213-11
RDCC Review:	Effective Date: 11/30/2009
Fee Surface Agreement	Siting: Suspends General Siting
Intent to Commingle	✓ R649-3-11. Directional Drill

Comments: Presite Completed

**Commingling Approved** 

4 - Federal Approval - dmason 15 - Directional - dmason 27 - Other - bhill Stipulations:

API Well No: 43013511530000



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## Permit To Drill

\*\*\*\*\*

**Well Name:** GMBU M-15-9-16 **API Well Number:** 43013511530000

Lease Number: UTU-017985 Surface Owner: FEDERAL Approval Date: 1/12/2012

#### Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well contact Carol Daniels at 801-538-5284

API Well No: 43013511530000

(please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
  - Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas

# RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEC 2 9 2011

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

BUREAU OF LAND	WANAGEMENT	UTU017985		
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Tribe Name		
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No. UTU87538X		
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Oth		8. Lease Name and Well No. GMBU M-15-9-16		
NEWFIELD EXPLORATION COMPANY: mcrozie		9. API Well No. 43-013-51153		
3a. Address ROUTE 3 BOX 3630 MYTON, UT 84052	3b. Phone No. (include area code) Ph: 435-646-4825 Fx: 435-646-3031	10. Field and Pool, or Exploratory MONUMENT BUTTE		
4. Location of Well (Report location clearly and in accorded	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Area		
At surface SWNE 1907FNL 2015FEL At proposed prod. zone NESW 2291FSL 2473FWL	40.032867 N Lat, 110.103192 W Lon	Sec 15 T9S R16E Mer SLB SME: BLM		
14. Distance in miles and direction from nearest town or post 17.5	office*	12. County or Parish 13. State DUCHESNE UT		
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Lease	17. Spacing Unit dedicated to this well		
1153'	560.00	20.00		
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19, Proposed Depth	20. BLM/BIA Bond No. on file		
962'	6260 MD 6090 TVD	WYB000493		
21. Elevations (Show whether DF, KB, RT, GL, etc. 5685 GL	22. Approximate date work will start 03/31/2012	23. Estimated duration 7 DAYS		
	24. Attachments			
The following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached to	this form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Of</li> </ol>	tem Lands, the Item 20 above). 5. Operator certification	formation and/or plans as may be required by the		
25. Signature (Electronic Submission)	Name (Printed/Typed) MANDIE CROZIER Ph: 435-646-4825	Date 12/28/2011		
Title REGULATORY ANALYST				
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	Date		
Title Applyton Field Manager	Office	JUL 0 3 201		
Lands & Mineral Resources	VERNAL FIELD OFFICE			
Application approval does not warrant or certify the applicant hoperations thereon.	olds legal or equitable title to those rights in the subject			
	ONDITIONS OF APPROVAL ATTACHED	DECEIVED		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 1 States any false, fictitious or fraudulent statements or representated.	ions as to any matter within its jurisdiction.	to make to any department or agency of the United		

Additional Operator Remarks (see next page)

DIV. OF OIL, GAS & MINING

Electronic Submission #126880 verified by the BLAND A Transition System
For NEWFIELD EXPLORATION COMPANY (Vernal
Committed to AFMSS for processing by LESLIE ROBINSON & 1/2012 (12LBR0175AE)

NOTICE OF APPROVAL

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

25X5NUUAS



# UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

**VERNAL. UT 84078** 

(435) 781-4400



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

**Newfield Production Company** 

GMBU M-15-9-16

API No: 43-013-51153 Location:

SWNE, Sec. 15, T9S, R16E

Lease No: UTU-017985

Agreement: **Greater Monument Butte** 

**OFFICE NUMBER:** 

(435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

## **NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location ar access roads.						
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.						
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.						
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov.						
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.						
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.						

Page 2 of 9 Well: M-15-9-16 6/29/2012

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
  work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
  mitigation may be necessary for the discovered paleontologic material before construction can
  continue.

## Wildlife

In accordance with the Record of Decision for the Castle Peak and Eightmile Flat Oil and Gas Expansion Project, Newfield Rocky Mountains Inc., the following COA's are required:

- WFM-1 On level or gently sloping ground (5 percent slope or less) Newfield will elevate surface pipelines (4 inches or greater in diameter) a minimum of 6 inches above the ground to allow passage of small animals beneath the pipe. This ground clearance will be achieved by placing the pipeline on blocks at intervals of 150 to 200 feet.
- WFM-4 Newfield will install noise reduction devices on all pump jacks to reduce intermittent noise to 45 dBA at 660 feet from the source.

### COA's derived from mitigating measures in the EA:

 The proposed project is within <u>mountain plover habitat</u>. In order to ensure habitat will be maintained, Newfield must use the following seed mix for all reclamation:

Common Name	Latin Name	Pure Live Seed (Lbs./Acre)	Limitations
Blue grama	Bouteloua gracilis	0.25	Over 10" precipitation
Squirreltail grass	Elymus elymoides	2.0	
Galleta grass	Pleuraphis jamesii	1.0	Utah seed only
Indian ricegrass	Achnatherum hymenoides	2.0	
Shadscale saltbush	Atriplex confertifolia	2.0	
Mat Saltbrush	Atriplex corrugata	2.0	Clay soils only
Gardner's saltbush	Atriplex gardneri	2.0	
Fringed sagebrush	Artemisia frigida	1.0	
Black sagebrush	Artemisia nova	0.25	Shallow soils only less than 24"
Scarlet globemallow	Sphaeralcea coccinea	0.25	

Page 3 of 9 Well: M-15-9-16 6/29/2012

# For protection of T&E Fish if drawing water from the Green River

- For areas of fresh water collection, an infiltration gallery will be constructed in a Service approved location. An infiltration gallery is basically a pit or trench dug within the floodplain to a depth below the water table. Water is drawn from the pit rather than from the river directly. If this is not possible, limit pumping within the river to off-channel locations that do not connect to the river during high spring flows.
- If water cannot be drawn using the measures above and the pump head will be located in the river channel where larval fish are known to occur, the following measures apply:
  - Avoid pumping from low-flow or no-flow areas as these habitats tend to concentrate larval fished
  - Avoid pumping to the greatest extent possible, during that period of the year when larval fish may be present (see previous bullet); and
  - Avoid pumping, to the greatest extent possible, during the midnight hours (10:00 p.m. to 2:00 a.m.) as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
  - Screen all pump intakes with 3/32-inch mesh material.

0

(435) 781-9453

Report any fish impinged on the intake screen to the FWS office (801.975.3330) and the:
 Utah Division of Wildlife Resources
 Northeastern Region
 152 East 100 North
 Vernal, UT 84078

### Air Quality

- 1. All internal combustion equipment will be kept in good working order.
- 2. Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
- 3. Open burning of garbage or refuse will not occur at well sites or other facilities.
- 4. Drill rigs will be equipped with Tier II or better diesel engines.
- 5. Low bleed pneumatics will be installed on separator dump valves and other controllers.
- 6. During completion, not venting will occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- 7. Telemetry will be installed to remotely monitor and control production.
- 8. Signs will be installed on the access road, reducing speed to 25 MPH, during the drilling phase.
- 9. When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO2 National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field

Page 4 of 9 Well: M-15-9-16 6/29/2012

modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas–fired drill rigs, installation of NOX controls, time/use restrictions, and/or drill rig spacing.

- 10. All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- 11. All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NOx per horsepower-hour.
- 12. Green completions will be used for all well completion activities where technically feasible.
- 13. Employ enhanced VOC emission controls with 95% control efficiency on production equipment having a potential to emit greater than 5 tons per year.

## Soils/Vegetation/Noxious Weeds

Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and rip rap or water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

### S.O.P.s

- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.
- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with longterm successful revegetation.
- All operator employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, ROW, COAs permits/authorizations on their person(s) during all phases of construction.

### Reclamation

 Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM and the Green River District Reclamation Guidelines (2011). Reclamation success will be determined in accordance with the 2011 Guidelines.

### **Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

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Prior to beginning new surface disturbance, the operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) providing the results of the noxious weed inventory described in the *Green River District Reclamation Guidelines* (2011). If weeds are found the report shall include 1) A GPS location recorded in North American Datum 1983; 2) species; 3) canopy cover or number of plants; 4) and size of infestation (estimate square feet or acres. Information shall be also documented in the reclamation report.

Page 6 of 9 Well: M-15-9-16 6/29/2012

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

### SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
  drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
  No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
  test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
  log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

Page 7 of 9 Well: M-15-9-16 6/29/2012

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 8 of 9 Well: M-15-9-16 6/29/2012

### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 9 of 9 Well: M-15-9-16 6/29/2012

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross Branden Arnold Phone Number 435-401-0223 Well Name/Number GMBU M-15-9-16 Qtr/Qtr SW/NE Section 15 Township 9S Range 16 Lease Serial Number UTU-017985 API Number 43-013-51153	
Spud Notice – Spud is the initial spudding of the wout below a casing string.	vell, not drilling
Date/Time <u>9/24/12</u> <u>4:00</u> AM PM	
<ul> <li>Casing – Please report time casing run starts, not times.</li> <li>✓ Surface Casing</li> <li>✓ Intermediate Casing</li> <li>✓ Production Casing</li> <li>✓ Liner</li> <li>✓ Other</li> </ul>	Cementing  RECEIVED  SEP 2 5 2012  DIV. OF OIL, GAS & MINING
Date/Time <u>9/25/12</u> <u>10:00</u> AM ⊠ PM	
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other Date/Time AM PM	
Remarks	

В	99999	17400	4304752404	GMBU G-12-9-17	NWNW	12	9\$	17E	UINTAH	9/19/2012	9-27-12
	BRRV	BHL	Senw								
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	WEI SC	L LOCATI	ON RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4304752405	GMBU X-1-9-17	NWNW	12	98	17E	UINTAH	9/19/2012	9.27.12
G	IRRV B	HL:S	I sesw								
ACTION	CURRENT	NEW	API NUMBER	WELL NAME		_	L LOCATA			SPUD	EFFECTIVE
В	ENTITY NO.	ENTITY NO.			00	SC	TP	RG	COUNTY	DATE	ļi
В	99999	17400	4301351153	GMBU M-15-9-16	SWNE	15	98	16E	DUCHESNE	9/25/2012	9.27.12
GRRY BHL: nesw											
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	WEL SC I	L LOCATION TP	ON RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301351152	GMBU L-15-9-16	SWNE	15		16E	DUCHESNE	9/24/2012	9.27.12

GRRV BHL: ruse

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED

SEP 2 3 2012

Div. of Oil, Gas & Mining

Tasha Robison

Production Clerk

09/26/12

B - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

E - Other (explain in comments section)

FORM 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

	BUREAU OF LAND MAN	5 Lease Serial N	5. Lease Serial No.						
SUNDRY	NOTICES AND REP	ORTS ON WELLS	UT11-017985	UTU-017985					
Do not use t	his form for proposals t ell. Use Form 3160-3 (A	6 If Indian Allo	6. If Indian, Allottee or Tribe Name.						
SUBMIT IN	TRIPLICATE - Other	7. If Unit or CA/.	Agreement, Name and/or						
Type of Well			GMEG						
	Other		8. Well Name an						
2. Name of Operator			GMBU M-15-9	-16					
NEWFIELD PRODUCTION CO	OMPANY	21. Diama (include or	9. API Well No.						
3a. Address Route 3 Box 3630		3b. Phone (include at		ol, or Exploratory Area					
Myton, UT 84052 4. Location of Well (Footage,	Sec., T., R., M., or Survey Desc	435,646,3721	GREATER ME						
4. Location of Wen (Poolage,	Jec., 1., R., M., or Burvey Desc	, ipilony	11. County or Pa						
Section 15 T9S R16E SW	NE		DUCHESNE,	UT					
12. CHECK	APPROPRIATE BOX	ES) TO INIDICATE N	ATURE OF NOTICE, OR O	THER DATA					
TYPE OF SUBMISSION		TYI	PE OF ACTION						
☐ Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity					
Subsequent Report	Casing Repair	New Construction	Recomplete	X Other					
<b>—</b>	Change Plans	Plug & Abandon	Temporarily Abandon	Spud Notice					
Final Abandonment	Convert to Injector	Plug Back	Water Disposal						
yield. Returned 5 barrels	s cement to pit. WOC.		0.25#/sk Cello- Flake Mixed @						
I hereby certify that the foregoing correct (Printed/ Typed) Branden Arnold	is true and	Title  Date							
Signature	[0]	09/26/2012							
	THIS SPACE	FOR FEDERAL OR S	TATE OFFICE USE						
Approved by		Title	D	ate					
Conditions of approval, if any, are attac certify that the applicant holds legal or which would entitle the applicant to con	equitable title to those rights in the aduct operations thereon.	subject lease Offi							
Title 18 LLS C Section 1001 and Title	43 U.S.C. Section 1212, make it a c	rime for any person knowingly an	d willfully to make to any department or a	ngency of the United					

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

RECEIVED

OCT 0 5 2012

# Casing / Liner Detail

Well	GMBU M-15-9-16
Prospect	Monument Butte
Foreman	
Run Date:	
String Type	Surface, 8.625", 24#, J-55, STC (Generic)

# - Detail From Top To Bottom -

Depth	Length	JTS	Description	OD	ID
323.18			13' kb		
13.00	1.43	<del></del>	Wellhead	8.625	
14.43	265.05	6	8 5/8 casing	8.625	
279.48	42.80	1	Shoe Joint	8.625	
322.28	0.90	. 1	Guide Shoe	8.625	
323.18			-		

					Cement Detail		
Cement C	ompany: E	BJ				to contract to the second of account	
Slurry	# of Sacks	Weight (ppg)	Yield	Volume (ft³)	Description - Slurry Class and Additives	<del></del>	
Slurry 1	160	15.8	1.17	187.2	Class G+2%kcl+.25#CF		
0/ 1 1 1		——————————————————————————————————————					
Stab-In-Jo	b?		No		Cement To Surface?	Yes	
BHT:			0		Est. Top of Cement:	0	
	nitial Circulation Pressure:				Plugs Bumped?	Yes	
	lation Rate:				Pressure Plugs Bumped:		
	lation Pressur	e:			Floats Holding?	No	
inal Circu	lation Rate:				Casing Stuck On / Off Bottom?	No	
Displaceme		N	/ater		Casing Reciprocated?	No	
Displaceme					Casing Rotated?	No	
	ent Volume:		17		CIP:	9:00	
lud Returr	ns:				Casing Wt Prior To Cement:		
entralizer	Type And Pla	cement:			Casing Weight Set On Slips:		
/liddle of fir	rst, top of seco	ond and third fo	r a total	of 3.	To vegit out on ones		



Sundry Number: 34612 API Well Number: 43013511530000

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-017985
SUNDR	Y NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly de reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU M-15-9-16
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013511530000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,		HONE NUMBER: Ext	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1907 FNL 2015 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 15 Township: 09.0S Range: 16.0E Meridia	n: S	STATE: UTAH
11. CHECK	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
□ NOTICE OF INTENT	ACIDIZE	ALTER CASING	CASING REPAIR
■ NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS	CHANGE TUBING  COMMINGLE PRODUCING FORMATIONS	☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	UBING REPAIR	VENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
2/4/2013	WILDCAT WELL DETERMINATION	OTHER	OTHER:
The above well w	completed operations. Clearly show all vas placed on production on 0 aced on pump on 02/04/2013	2/04/2013 at 14:00	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 21, 2013
NAME (PLEASE PRINT) Jennifer Peatross	PHONE NUMBER 435 646-4885	TITLE Production Technician	
SIGNATURE N/A		<b>DATE</b> 2/7/2013	

RECEIVED: Feb. 07, 2013

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

WELL	COMPLETION	OR RECOMPL	FTION REPORT	ANDLOG
VVLLL		I OK KEGUIVIPL	CINNECTURI	ANIJICA

	WI	ELL C	OMPLE	ETION (	OR RE	COMPLET	TION	REPO	RT A	ND L	OG				ease Ser J-01798		
la. Type of V			il Well ew Well	Gas W	ell Cover	Dry Deepen	Other Plug	r Back	Diff.	Resvr.,						Allottee or T	ribe Name
			ther:					-							nit or C. 3U (GF		Name and No.
2. Name of NEWFIELI	Operator D EXPLOF	RATIO	N COMPA	ANY										8. L	ease Nai	me and Well 1 5-9-16	No.
3. Address	1401 17TH S				202						ude ar	ea code)		9. A	FI Well	No.	
				•		ce with Federa	l requ		6) 646- *	3/21					)13-511 Field and	153 d Pool or Exp	loratory
At surface				/O14/61EN				· · · · · · · · · · · · · · · · · · ·						MOI	NUME	NT BUTTE	_
Aisuiao	° 1907' Fr	NL & 2	015' FEL	(SW/NE)	SEC. 1	5, T9S, R16	E (U1	TU-01798	35)						Sec., T., Survey o	R., M., on Bl r Area	lock and 15, T9S, R16E
At top pro	d. interval r	eported	below 25	39' FNL 8	§ 2461' I	FEL (SW/NE	) SE	C. 15, T9	9S, R1	6E (UT	ΓU-01	17985)		12. (	County	or Parish	13. State
At total de	2288'	FSL 8	2496' FV	VL (NE/S	W) SEC	. 15, T9S, F	16E	(UTU-01	7985)	•		,		ł	CHESN		UT
14. Date Sp	udded		15. I	Date T.D. R				16. Date	Comp	leted 02	2/04/:	2013		17. I	Elevatio	ns (DF, RKE	
09/25/201 18. Total De		6260		8/2012	9. Plug l	Back T.D.;	MD 6		& A	<b>√</b> R		o Prod. epth Brid	lge Plug		5' GL : MD	5698' KB	
21. Type El	TVI	0 6092	2'		•	7		6064_				Vas well			TVD	Yes (Submit	
						TRON,GR,C	ALIF	PER, CM	T BON		7	Vas DST	run?	N 🔽	。	Yes (Submit	report)
23. Casing										<u>.</u>		Directiona	l Survey	? <u>  N</u>	<u> </u>	Yes (Submit	copy)
Hole Size	Size/Gra	ade	Wt. (#/ft.)	Top (l	(ID)	Bottom (MD)	.   5	Stage Ceme Depth	enter	No. o	of Ska of Ce		Slurry (BE		Cem	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-		24#	0		323'				160 CI							
7-7/8"	5-1/2" J-	55 1	15.5#	0		6257'	_			216 PF 480 50			<del>,</del>		SURF	ACE	
							-			400 50	// 5U F	02					
														-			
24. Tubing	Pecord																
Size	Depth S	Set (MD		r Depth (M	D)	Size	D	epth Set (1	MD)	Packer I	Depth	(MD)	Siz	e	Dept	h Set (MD)	Packer Depth (MD)
2-7/8" 25. Produci:	EOT@		'  TA @ :	5604'			26.	Perfor	ation F	ecord						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Formation			Тор		Bottom		Perfora	ited Int			Si	ze	No. I	loles		Perf. Status
A) Green I B)	River		38	999' MD	50	320' MD	39	99-5320'	MD			0.34"		105			
C)							+						-		. ,,		
D)																	
27. Acid, Fi	racture, Trea Depth Inter		Cement Sq	ueeze, etc.					Ā	mount a	and Ty	pe of Ma	aterial				
3999-5320			Fr	ac w/ 416	377#s 2	20/40 white :	sand	in 3870 b						ges.			
												•••			<del>.</del>		
		_															
28. Product Date First		al A Hours	- hrant	0:1	10		17 - 1 -	<u> </u>	11.0	•,	- 10						
Produced	Test Date	Tested	Test Produc	Oil ction BBI			Water BBL		il Grav orr. AF		Ga Gr	ıs avity	ı	uction M		•	
	2/15/13	24	$\rightarrow$	98		24	80			r			2-1	/2" x 1-3	3/4" x 2	20' x 21' x 2	4' RHAC Pump
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBI			Water BBL		as/Oil atio		W	ell Status	3				
	SI										P	RODUC	CING				
28a. Produc					L												
Date First Produced	Test Date	Hours Tested	Test Produc	Oil ction BB			Water BBL		il Grav orr. AF		Ga Ga	as avity	Proc	uction M	fethod		
												-					RECEIVE
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BB			Water 3BL		as/Oil atio		w	ell Status	3				
	SI	[			_	J	سومدر		V							r	RECEIVED MAR 1 2 2013
*(See instr	uctions and	spaces	for addition	nal data on	page 2)			<u>_</u>								DIV. c	OFOU OAS
																	OF OIL, GAS & MINING

•										
28b. Prod Date First	uction - Inte Test Date	rval C Hours	Test	Oil	Can	Miroton	loit cir.	10	<b>D</b> 1 : 36 1 1	
Produced	Test Date	Tested	Production	BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
	uction - Inte									***
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Flwg. SI	Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
29. Dispo	sition of Ga	s (Solid, u	sed for fuel, ve	ented, etc.,	)			•		
	USED FOR F									
30. Sumr	nary of Porc	ous Zones	(Include Aqu	ifers):		-		31. Formati	on (Log) Markers	
Show include recover	ing depth int	t zones of terval teste	porosity and c ed, cushion us	contents the	ereof: Cored i	ntervals and all ng and shut-in p	drill-stem tests, pressures and	GEOLOGI	CAL MARKERS	
Eam	mation	T	Dette							Тор
ron	manon	Тор	Bottom		Desc	criptions, Conte	nts, etc.		Name	Meas. Depth
					3. T. S.			GARDEN GU GARDEN GU		3615' 3835'
								GARDEN GU POINT 3	LCH 2	3941' 4203'
								X MRKR Y MRKR		4470' 4513'
								DOUGLAS CI BI CARBONA		4635' 4868'
								B LIMESTON CASTLE PEA		4988' 5489'
								BASAL CARB WASATCH	ONATE	5969' 6095'
32. Addit	tional remar	ks (includ	e plugging pro	ocedure):						
33. Indic	ate which ite	ems have	been attached	by placing	a check in the	appropriate bo	xes:	****		
∏ Ele	ctrical/Mech	anical Log	s (1 full set req	'd.)		Geologic Repor	rt DST I	Report	✓ Directional Survey	
Sur	ndry Notice f	or pluggin	g and cement v	erification		Core Analysis	<b>✓</b> Other	Drilling Daily	Activity	
					ormation is con	nplete and corre			ecords (see attached instructions)	)*
	Name <i>(please</i> Signature	e print	ennifer Peat	ross			Title Producti Date 03/04/20	on Technician 13		
Title 18 U	J.S.C. Section	on 1001 ar	nd Title 43 U.S	S.C. Section	on 1212, make	it a crime for ar	ny person knowingl	y and willfully to	make to any department or agen	cy of the United States any
false, fict	false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.									



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 15 T9S, R16E M-15-9-16

Wellbore #1

**Design: Actual** 

# **Standard Survey Report**

14 January, 2013





## **Payzone Directional**

Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 15 T9S, R16E

Well: Wellbore: Design:

M-15-9-16 Wellbore #1

Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Capstar 329) M-15-9-16 @ 5697.0ft (Capstar 329)

Minimum Curvature

EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

US State Plane 1983

North American Datum 1983

Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

SECTION 15 T9S, R16E

Site Position: From:

Мар

Northing: Easting:

7,183,000.00 ft

Latitude:

Longitude:

40° 1' 50.203 N 110° 5' 12.634 W

**Position Uncertainty:** 

Slot Radius:

2,036,100.00 ft

0.0 ft

Grid Convergence:

0.91°

Well Well Position M-15-9-16, SHL LAT: 40 01 58.32 LONG: -110 06 11.49

+N/-S

0.0 ft +E/-W 0.0 ft Northing: Easting:

7,183,749.24 ft 2,031,509.87 ft Latitude: Longitude:

40° 1' 58.320 N 110° 6' 11.490 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

11/1/2011

5,697.0 ft

11.28

Ground Level:

65.77

5,685.0 ft

52,219

		Wellbore #1
ecological action confe	Antimistraliminarian	

Magnetics **Model Name** IGRF2010 Sample Date

Declination (°)

Dip Angle (°)

Field Strength (nT)

Design Actual

Audit Notes:

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD)

(ft)

0.0

+N/-S (ft)

0.0

+E/-W (ft) 0.0

Direction (°) 215.31

Survey Program

1/14/2013

From (ft)

To (ft)

Survey (Wellbore)

**Tool Name** 

Description

346,0

6,260.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Survey

Measured Depth	Inclination		Vertical Depth			Vertical	Dogleg	Build	Turn
(ft)	(°)	Azimuth (°)	(ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
346.0	0.90	193.50	346.0	-2.6	-0.6	2.5	0.26	0.26	0.00
438.0	0.80	184.20	438.0	-4.0	-0.9	3.7	0.18	-0.11	-10.11
529.0	0.80	180.20	529.0	-5.3	-0,9	4.8	0.06	0.00	-4.40
622.0	0.90	184.00	622.0	-6.6	-1.0	6.0	0.12	0.11	4.09
713.0	1.90	203.30	712.9	-8.7	-1.6	8.0	1.20	1.10	21.21
804.0	4.30	207.50	803.8	-13.1	-3.8	12.9	2.65	2.64	4.62
896.0	5.70	212.50	895.4	-20.1	-7.8	20.9	1.59	1.52	5.43
989.0	6.90	217.30	987.9	-28.4	-13.7	31.1	1.41	1.29	5.16
1,110.0	8.80	217.80	1,107.7	-41.5	-23.8	47.6	1.57	1.57	0.41
1,201.0	8.90	217.80	1,197.7	-52.6	-32.3	61.6	0.11	0.11	0.00
1,291.0	9.60	216.90	1,286.5	-64.1	-41.1	76.0	0.79	0.78	-1.00
1,382.0	10.40	217.10	1,376.1	-76.7	-50.6	91.8	0.88	0.88	0.22



# **Payzone Directional**

Survey Report



Company:

NEWFIELD EXPLORATION

Project: Site:

USGS Myton SW (UT)

Well:

SECTION 15 T9S, R16E M-15-9-16

Wellbore: Wellbore #1 Design: Actual

Local Co-ordinate Reference:

**TVD Reference:** 

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Capstar 329) M-15-9-16 @ 5697.0ft (Capstar 329)

True

Minimum Curvature

EDM 2003.21 Single User Db

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
1,472.0	11.60	217.00	1,464.4	-90.4	-61.0	109.0	1.33	1.33	- <b>0.11</b>
1,563.0	12.80	217.10	1,553.4	-105.7	-72.6	128.2	1.32	1.32	0.11
1,654.0	13.90	216.30	1,641.9	-122.6	-85.1	149.2	1.23	1.21	-0.88
1,744.0	14.40	213.90	1,729.2	-140.6	-97.8	171.2	0.86	0.56	-2.67
1,835.0	14.50	213.00	1,817.3	-159.5	-110.3	193.9	0.27	0.11	-0.99
1,926.0	14.90	213.20	1,905.3	-178.9	-122.9	217.0	0.44	0.44	0.22
2,016.0	15.40	215.90	1,992.2	-198.2	-136.2	240.5	0.96	0.56	3.00
2,107.0	15,50	217.30	2,079.9	-217.7	-150.7	264.7	0.42	0.11	
2,198.0	16.10	220.10	2,167.5	-237.0	-166.2	289.5	0.42 1.07	0.11 0.66	1.54
2,288.0	15.60	220.90	2,254.1	-255.7	-182.1	313.9	0.61	-0.56	3.08 0.89
2,379.0	15.70	220.30	2,341.7	-274.3	-198.1	338.4	0.01	0.11	-0.66
2,469.0	14.50	215.80	2,428.6	-292.8	-212.6	361.8	1.86	-1.33	-5.00
2,560.0	14.70								
2,650.0 2,650.0	16.30	213.60 215.40	2,516.6 2,603.4	-311.6 -331.4	-225.6	384.7	0.65	0.22	-2.42
2,741.0	19.10	213.40	2,603.4 2,690.1	-351.4 -353.0	-239.3 -256.5	408.8	1.86	1.78	2.00
2,832.0	17.60	215.10	2,776.4	-353,0 -375,5	-256.5 -274.3	436.3 464.9	3.67 2.73	3.08	6.59
2,922.0	15.20	216.70	2,862.8	-375.5 -396.0	-214.3 -289.2	490.3	2.73 2.71	-1.65 -2.67	-6.92 1.78
			•						1.70
3,013.0	15.60	217.90	2,950.5	-415.3	-303.8	514.5	0.56	0.44	1.32
3,104.0	17.50	214.30	3,037.7	-436.2	-319.0	540.4	2.37	2.09	-3.96
3,194.0	17.90	209.40	3,123.5	-459.5	-333.4	567.7	1.71	0.44	-5.44
3,285.0	15.80	203.90	3,210.6	-483.0	-345.3	593.7	2.90	-2.31	-6.04
3,376.0	16.50	206.70	3,298.0	-505,8	-356.2	618.6	1.15	0.77	3.08
3,466.0	14.30	210.40	3,384.7	-526.9	-367.5	642.4	2.68	-2.44	4.11
3,557.0	14.30	213.70	3,472.9	-545.9	-379.4	664.8	0.90	0.00	3.63
3,647.0	13.40	214.00	3,560.3	-563.8	-391.4	686.3	1.00	-1.00	0.33
3,738.0	13.30	217.40	3,648.9	-580.8	-403.7	707.3	0.87	-0.11	3.74
3,828.0	13.60	218.00	3,736.4	-597.4	-416.5	728.2	0.37	0.33	0.67
3,919.0	14.80	221.70	3,824.6	-614.5	-430.8	750.5	1.65	1.32	4.07
4,010.0	14.70	221.00	3,912.6	-631.9 <b>←</b>		773.5	0.22	-0.11	-0.77
4,100.0	15.00	220.00	3,999.6	-649.4	-461.1	796.5	0.44	0.33	-1.11
4,191.0	14.20	216.50	4,087.7	-667.4	-475.3	819.4	1.31	-0.88	-3.85
4,281.0	13.60	215.20	4,175.0	-685.0	-488.0	841.0	0.75	-0.67	-1.44
4,372.0	14.00								
4,463.0	14.20 14.40	215.50 211.00	4,263.4	-702.8	-500.6	862.9	0.66	0.66	0.33
4,553.0	15.70	211.00	4,351.5	-721.6	-512.9	885.3	1.24	0.22	-4.95
4,644.0	14.00		4,438.5	-741.6	-525.0	908.6	1.44	1.44	0.11
4,735.0	12.70	210.10 211.80	4,526.4 4,615.0	-761.7 -779.7	-536.9 -547.7	931.9 952.8	1.89	-1.87	-1.10
•							1.49	-1.43	1.87
4,825.0	15.00	215.10	4,702.3	-797.6	-559.6	974.3	2.70	2.56	3.67
4,916.0	13.90	216.20	4,790.5	-816.1	-572.8	997.0	1.25	-1.21	1.21
4,923.8	13.92	216.36	4,798.0	-817.6	-573.9	998.9	0.53	0.22	2.03
M-15-9-16 TO									
5,006.0	14.10	218.00	4,877.8	-833.4	-585.9	1,018.8	0.53	0.22	2.00
5,097.0	14.50	221.30	4,966.0	-850.7	-600.3	1,041.2	1.00	0.44	3.63
5,188.0	15.20	217.30	5,053.9	-868.8	-615.0	1,064.5	1.36	0.77	-4.40
5,278.0	14.46	209.61	5,140.9	-887.9	-627.7	1,087.4	2.33	-0.82	-8.54
5,369.0	13.45	211.49	5,229.2	-906.9	-638.9	1,109.3	1.22	-1.11	2.07
5,460.0	14.50	210.30	5,317.6	-925.7	-650.2	1,131.2	1.20	1.15	-1.31
5,550.0	15.69	214.40	5,404.4	-945.5	-662.7	1,154.6	1.78	1.32	4.56
5,641.0 5,731.0	15.64 16.74	216.37	5,492.1	-965.5	-676.9	1,179.2	0.59	-0.05	2.16
5,731.0 5,822.0		218.44	5,578.5 5,665.8	-985.4 1.005.6	-692.2	1,204.2	1.38	1.22	2.30
5,822.0 5,912.0	16.20 15.40	219.00	5,665.8 5.752.4	-1,005.6 1,024.5	-708.3	1,230.0	0.62	-0.59	0.62
5,912.0 6,003.0	15.40 13.50	219.80 219.90	5,752.4 5,840.5	-1,024.5 -1,041.9	-723.9 -738.4	1,254.4	0.92	-0.89	0,89
0,000.0	13.30	ارق. قا م	5,840.5	-1,041.8	-730.4	1,277.1	2.09	-2.09	0.11



# **Payzone Directional**

Survey Report



Company:

NEWFIELD EXPLORATION

Project: Site:

USGS Myton SW (UT) SECTION 15 T9S, R16E

Well: Wellbore: M-15-9-16

Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

Well M-15-9-16

M-15-9-16 @ 5697.0ft (Capstar 329) M-15-9-16 @ 5697.0ft (Capstar 329)

MD Reference:

North Reference:

True

Survey Calculation Method:

Minimum Curvature

Database:

EDM 2003.21 Single User Db

S				

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination (°)	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)		(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
6,184.0	10.90	213.80	6,017.2	-1,073.4	-761,2	1,315.9	1.90	-1.89	-1.00
6,207.0	10.70	213.90	6,039.8	-1,077.0	-763.6	1,320.2	0.87	-0.87	0.43
6,260.0	10.70	213.90	6,091.9	-1,085.1	-> -769.1	1,330.1	0.00	0.00	0.00

Checked By:	Approved By:	Date:



Project: USGS Myton SW (UT) Site: SECTION 15 T9S, R16E

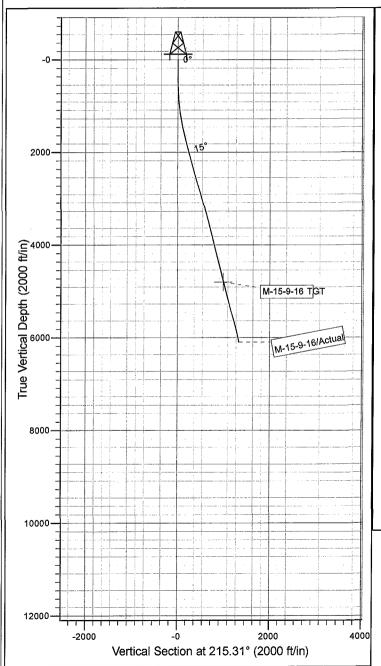
Well: M-15-9-16 Wellbore: Wellbore #1 Design: Actual

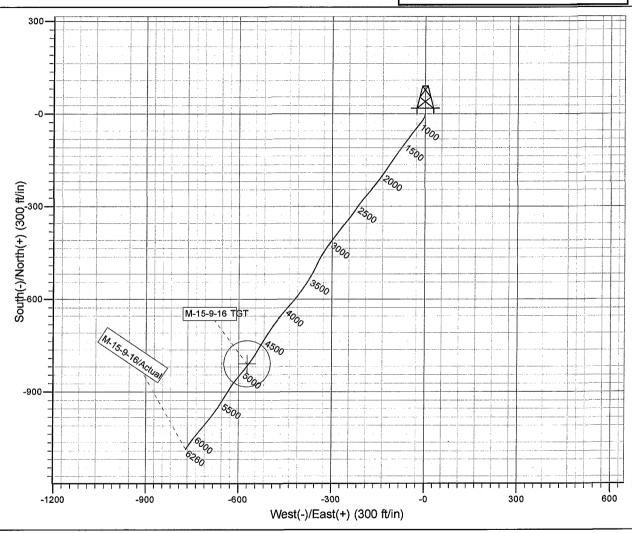


Azimuths to True North Magnetic North: 11.28°

Magnetic Field Strength: 52219.0snT Dip Angle: 65.77° Date: 11/1/2011 Model: IGRF2010









Design: Actual (M-15-9-16/Wellbore #1)

Created By: Sarah Webb

Date:

13:40, January 14 2013

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA

# **Daily Activity Report**

# Format For Sundry GMBU M-15-9-16 12/1/2012 To 4/28/2013

1/18/2013 Day: 1

Completion

Rigless on 1/18/2013 - Run CBL, Cement top @ surface, Test Csg, BOPE, Frac valve & 2-outer gate valves (All good), Perf 1 st stg, CP-2 & CP-1 Formation - Pre-job Safety Meeting & JSA - RU Perforators W/L, MU & RIH w/ logging tools, Tag @ 6201', ( PBTD @ 6231'), Log out of hole w/ 0 psi on well, Cement top @ surface, Log short jt @ 3303'-14', LD logging tools. - RU G4 Test unit, Dead head test unit, Test hyd. chambers on BOP ( 1,500 psi on acc.), Fill & test csg, Frac valve & inner gate valve to 250 psi 5-min low & 4,300 psi 30-min high, Shut BOP & lock rams w/ 1,500 psi on acc. Bleed off & vent acc, Test BOP & outter gate valve to 250 psi 5-min low & 4,300 psi 10-min high, All tests good. - RU Perforators W/L, MU & RIH w/ 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen) & perforate CP-2 formation @ 5616'-20', & CP-1 @ 5584'-86', 5575'-76', POOH w/ W/L, LD guns, All fired, RD W/L, Dump 10 gal of diesel down csg for freeze blanket, SWI

Daily Cost: \$0

Cumulative Cost: \$33,252

1/21/2013 Day: 2

Completion

Rigless on 1/21/2013 - RU Weatherford frac crew, Got late start on frac due repairs on acid transport, Start @ 11:40, Frac stgs 1-4 & set plug & perf stg #5, - 4th stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000 psi, (Pump 19# fluid system) Open well w/ 1094 psi, Break down C-Sands & D-3 formations @ 2221 psi @ 3 bpm w/ 1 bbls 7% KCL, Pumped 72 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 495 bbls 7% KCL 2.5#- 6# sand (ramped) Pumped 12 bbls 15% HCL, Pumped 102 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 3515, Avg psi 3017, Max rate 30 bpm, Avg rate 28 bpm, ISIP 2228, F.G. .89, Pumped 89,511# 20/40 White Sand in formation, (Pumped total of 693 bbl fluid) - RU Weatherford frac equip, Had to fix line on acid transport ( 3.5 hr), Go over & verify QA/QC for pre-job testing, Had to fix leak on pump when tryiing to press test. - 1st stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000 psi, ( Pump 19# fluid system) Open well w/ 522 psi, Break down CP-2 & CP-1 formations @ 3351 psi @ 2.3 bpm w/ 3 bbls 7% KCL, Pump 18 bbls 15% HCL, Pumped 66 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 473 bbls 7% KCL 2.5#- 6# sand (ramped) Pumped 12 bbls 15% HCL, Pumped 121 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 3770, Avg psi 2321, Max rate 41 bpm, Avg rate 31 bpm, ISIP 1756, F.G. .75, Pumped 75,414# 20/40 White Sand in formation, ( Pumped total of 690 bbl fluid) - 2nd stg. RU Perforators W/L, Press test lube to 5000 psi w/ frac crew, RIH w/ WFT 5 1/2" 6K CFTP & 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen, 120 deg phasing), Set CFTP @ 5340', Perforate LODC formation @ 5260'-62', 5245'-46' & A-3 formation @ 5108'-10', (15 holes), POOH & RD W/L, SWI, - 2nd stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000 psi, (Pump 19# fluid system) Open well w/ 1069 psi, Break down LODC & A-3 formations @ 1971 psi @ 3 bpm w/ 1 bbl 7% KCL, Pumped 138 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 440 bbls 7% KCL 2.5#- 6# sand (ramped) ( Sanded of tub during first 2k of sand, flushed out tub), Pumped 12 bbls 15% HCL, Pumped 110 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 3355, Avg psi 2782, Max rate 35 bpm, Avg rate 25 bpm, ISIP 2375, F.G. .89, Pumped 80,514# 20/40 White Sand in formation, ( Pumped total of 714 bbl fluid) (During job transducer went bad causing ghost pressures & pumps to kick out) - 3rd stg. RU Perforators W/L, Press test lube to 5000 psi w/ frac crew, RIH w/ WFT 5 1/2" 6K CFTP & 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen, 120 deg phasing), Set CFTP @ 5045', Perforate B-2 formation @ 4968-71', & 4960'-62", (15 holes), POOH & RD W/L, SWI, - 3rd stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000

psi, ( Pump 19# fluid system) Open well w/ 1745 psi, Break down B-2 formations @ 2289 psi @ 3 bpm w/ 1 bbls 7% KCL, Pumped 32 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 457 bbls 7% KCL 2.5#- 6# sand (ramped) Pumped 12 bbls 15% HCL, Pumped 104 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 2487, Avg psi 2148, Max rate 32 bpm, Avg rate 30 bpm, ISIP 1924, F.G. .82, Pumped 69,103# 20/40 White Sand in formation, ( Pumped total of 619 bbl fluid) - 4th stg. RU Perforators W/L, Press test lube to 5000 psi w/ frac crew, RIH w/ WFT 5 1/2" 6K CFTP & 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen, 120 deg phasing), Set CFTP @ 4900', Perforate C-Sands @ 4832'-34', 4824'-25' & D-3 formation @ 4779'-80', (12 holes), POOH & RD W/L, SWI, - Wait on sand for next 2 stgs. - 5 stg. RU Perforators W/L, Press test lube to 5000 psi w/ frac crew, RIH w/ WFT 5 1/2" 6K CFTP & 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen, 120 deg phasing), Set CFTP @ 4500', Perforate PB-11 @ 4420'-24',' & PB-10 @ 4387'-90'', (21 holes), POOH & RD W/L, SWI, Tarp wellhead & run heater for night.

Daily Cost: \$0

**Cumulative Cost:** \$33,552

### 1/22/2013 Day: 3

Completion

Rigless on 1/22/2013 - Frac 2 remaining stgs, Flow back well to pit, Well died in 2 hrs, Recovered 240 bbls fluid, (END WATER 3,696) - 6th stg. RU Perforators W/L. Press test Jube to 5000 psi w/ frac crew, RIH w/ WFT 5 1/2" 6K CFTP & 3 1/8" Disposable slick guns (16g, 0.34 EH, 21.00 pen, 120 deg phasing), Set CFTP @ 4190', Perforate GB-6 @ 4112'-14, 4107'-08,' & GB-4 @ 4045'-46', 4039'-40', & GB-2 @ 4007'-08', 3999'-00' (21 holes), POOH & RD W/L, SWI, - - RD Weatherford frac equip & move to L-15-9-16, ( Pumped ttl of 3,936 bbls), Open well @ 1709 psi on 20 choke to pit @ approx. 3 bpm, Well died, Recover 240 bbls, SWI - 6th stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000 psi, ( Pump 19# fluid system) Open well w/ 1184 psi, Break down GB-6, GB-4 & GB-2 formations @ 1423 psi @ 3 bpm w/ 2 bbl 7% KCL, Pumped 34 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 428 bbls 7% KCL 2.5#- 6# sand (ramped), Pumped 95 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 3744, Avg psi 2971, Max rate 43 bpm, Avg rate 38 bpm, ISIP 1988, F.G. .93, Pumped 56,732# 20/40 White Sand in formation, (Pumped total of 557 bbl fluid) - 5th stg. RU Weatherford frac, Hold safety meeting, Test lines to 5000 psi, ( Pump 19# fluid system) Open well w/ 916 psi, Break down PB11 & PB10 formations @ 1713 psi @ 3 bpm w/ 1 bbl 7% KCL, Pumped 190 bbls 7% KCL gelled fluid to get to rate & x-link, Pumped 357 bbls 7% KCL 2.5#- 6# sand (ramped)( Sanded of tub during first 15k of sand, flushed out tub), Pumped 12 bbls 15% HCL, Pumped 92 bbls 7% KCL flush tailed in w/ 30 bbls brine, Max psi 3240, Avg psi 2682, Max rate 47 bpm, Avg rate 34 bpm, ISIP 2131, F.G. .92, Pumped 45,103# 20/40 White Sand in formation, (Pumped total of 663 bbl fluid)

**Daily Cost:** \$0

Cumulative Cost: \$171,290

### 1/30/2013 Day: 4

Completion

Nabors #1420 on 1/30/2013 - Test hyd chamber & pipe rams on KNIGHT BOPs, Good Tests, MIRUSU, RU workfoor, Tally & drift tbg, PU 4 3/4" mill & tbg. - RU WORKFLOOR, CHANGE OVER TO TBG EQUIP - MIRUSU, MOVE PIPE RACKS & ACCUMLATORS - NU knight drill out BOPs, Install hanger w/ 2-way check, RU 4G test unit, Test hyd chambers on BOPs for 5-min ea, Test pipe rams & gate valves, Pipe ram tests were done w/ rams locked & acc vented to tank, 1,500 psi on manifold of acc, Had to tighten ram doors, All tests good. - CREW TRAVEL - REMOVE TBG THREAD PROTECTORS, TALLY AND DRIFT TBG. - SECUR THE WELL, DRAIN PUMP AND PUMP LINES AND WRAP B.O.P.S. - PICK UP AND RIH W/ 4 3/4" CONCAVE MILL & BIT SUB, 1- JT OF 2 7/8" J55 TBG, X-NIPPLE AND 98- JTS OF 2 7/8" J55 TBG.

**Daily Cost:** \$0

Cumulative Cost: \$263,428

Summary Rig Activity

### 1/31/2013 Day: 5

Completion

Nabors #1420 on 1/31/2013 - PU tbg & drill out plugs, Circulate well clean - CREW TRAVEL -RD POWER SWIVEL AND SECURE THE WELL, WRAP THE WELL HEAD UP UP AND PUT THE HEATER HOSE UNDER IT, DRAIN THE PUMP AND PUMP LINES - CIRCULATED WELL W/ 120 BBLS - DRILL OUT THE 5TH AND LAST PLUG @ 5340', THE WELL WENT ON A SUCK FOR A COUPLE OF MIN AFTER MILLING OFF TOP OF PLUG - DRILLED UP THE REMANDER OF THE 4TH PLUG AND WASH DOWN TO THE 5TH PLUG @ 5340' - PICKED UP 5- JTS OF TBG W/ THE SWIVEL. TAG FILL @ 5165', 175' OF FILL - DRILLED UP THE REMANDER OF THE 3RD PLUG AND THE 4TH PLUG @ 5045' - PICKED UP 4- JTS OF TBG W/ THE SWIVEL, WENT ALL THE WAY TO THE 4TH PLUG, NO FILL - DRILL OUT THE 3RD PLUG @ 4900', WELL WENT ON A SUCK FOR A COUPLE OF MIN AFTER MILLING OFF THE TOP OF PLUG - DRILL UP THE REMANDER OF THE 2ND PLUG AND WASH DOWN TO THE 3RD PLUG - PICK UP 9- JTS OF TBG W/ SWIVEL, TAG FILL @ 4825', 75' OF FILL - DRILL UP PLUG #2 @ 4520' - DRILL UP THE REMANDER OF THE 1ST PLUG, WASH DOWN TO THE 2ND PLUG - PICK UP 9- JTS OF TBG W/ THE SWIVEL, TAG FILL @ 4460', 60' OF FILL - CIRCULATE SAND OFF PLUG, DRILL OUT PLUG #1 @ 4190' - RU RBS POWER SWIVEL, RU PUMP AND PUMP LINES. - PICK UP AND RIH W/32-JTS OF 2 7/8" J55 TBG, TAG FILL@ 4120', 90' OF FILL - TALLY AND DRIFT TBG - CONDUCT A SAFETY MEETING AND A JSA - CREW TRAVEL

**Daily Cost:** \$0

Cumulative Cost: \$270,940

## 2/3/2013 Day: 6

Completion

Nabors #1420 on 2/3/2013 - C/O to PBTD, TOOH w/ tbg & drill out BHA, TIH w/ prod tbg, Land tbg & set TAC, Test wellhead w/ BPV to 800 psi - SECURE THE WELL, DRAIN UP THE PUMP AND PUMP LINES - CONDUCT A SAFETY MEETING AND A JSA - PUT TOGETHER THE PUMP AND PUMPLINES, TBG WAS ON A SUCK AND THE CSG HAD 50 PSI - PICK UP 24- JTS OF 2 7/8" J55 TBG, TAG FILL @ 6120', 111' OF FILL. - DRILLED OUT THE REMANDER OF THE 5TH PLUG AND WASH DOWN TO PBTD @ 6231' - CIRCULATE THE WELL W/ 60BBLS, RIG DOWN THE POWER SWIVEL, THEN CIRCULATED THE WELL W/ ANOTHER 180 BBLS - LD 18-JTS OF 2 7/8" J55 TBG ON THE RACK AND TOOH STANDING BACK 179- JTS OF 2 7/8" J55 TBG, X-NIPPLE, 1- JT OF 2 7/8" J55 TBG, BIT SUB AND BIT - RIH W TBG AS FOLLOWS: 2 7/8" NOTCHED COLLAR, 2- JTS OF 2 7/8" J-55 TBG, 2 7/8" SEAT NIPPLE, 1- JT OF 2 7/8" J-55 TBG, 5 1/2" TBG ANCHOR, 177- JTS OF 2 7/8" J55 TBG, SET THE ANCHOR @ 5606' W/ 19500K TENSION, SEAT NIPPLE IS @5638' AND THE EOT IS @5702', THERE IS 530' OF RATHOLE, - NIPPLE DOWN B.O.P.S. - CREW TRAVEL - CREW TRAVEL - INSTALL 2-WAY CHECK AND PRESSURE TEST THE TBG HANGER TO 800 PSI FOR 15 MIN - REMOVE 4' SUB, INSTALL NEW TBG HANGER, NIPPLE UP WELL HEAD

Daily Cost: \$0

**Cumulative Cost:** \$278,977

### 2/5/2013 Day: 7

Completion

Nabors #1420 on 2/5/2013 - PU pump & rods, Space out & seat pump, RU pumping unit, PWOP @ 14:00 ( END WATER 3,696 ) - Travel time, start rig, morning meeting - Bleed off well, flush TBG w/ 30 BBL - Rack out BOP's, X-O to rod equip, Prep rods - PU & prime pump, RIH w/ 2 1/2" x 1 3/4" x 24' RHAC pump, 28- 7/8" 8 per, 118- 3/4" 4 per, 78- 7/8" 4 per, 1 7/8" x 2' pony, 1 1/2" x 30' polish rod, Space out & seat pump - Travel time - Prep to RD, RD, Prep rig to move, Clean up location, Rack out pump & equip - Road Rig & Equipment to S-9-9-17 - Spot rig, Spot pipe racks, Clean up for the night - Filled TBG w/ 5 bbl, Hang head, Stroke test pump to 800 PSI, Good action, SL 144, 5 SPM, PWOP @ 14:00

Daily Cost: \$0 Cumulative Cost: \$365,590

**Pertinent Files: Go to File List**